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Full Name of Author — Nom complet de l'auteur: Kasper MAZUREK

Date of Birth — Date de naissance: Aug 31/47

Country of Birth — Lieu de naissance: Lebanon

Permanent Address — Résidence fixe:
9929 - 78 street
Edmonton, Alberta

Title of Thesis — Titre de la thèse: History; Historiography; Historical Praxis

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "History; Historiography; Historical Praxis" submitted by Kasper Mazurek in partial fulfillment of the requirements for the degree of Doctor of Philosophy in History of Education.

Harry Garfinkle
Supervisor

Richard Jung

Nick Kach

David G. Wangler

T.R. Morrison
External Examiner

Date December 12, 1980

ABSTRACT

Practicing historians and historical methodologists are fragmented into schools of thought characterized by differences of opinion on the very structure, method and philosophy of their subject and discipline. Debates among these orientations continue, due largely to the absence of mutually recognized common conceptual frameworks within which areas of divergence and agreement may be articulated and addressed. It is argued that one fruitful method of so grouping schools of historiography is to gather their elements under the conceptual and methodological umbrella of three modes of inquiry.

What is being termed a mode of inquiry is a pure type of a 'meta-paradigm' which provides a framework for grouping a plethora of diverse historiographic orientations. These modes are in fact complete weltanschauungen within which historiography is recognized as disciplinary theory and practice within an encompassing, pervasive and consistent ontological, epistemological and axiological world view.

Modes I and II are antithetical perspectives, and it is argued that the very great majority of historiographic orientations can be placed on a continuum between these two polarized pure types. In consequence a clear frame of reference emerges which provides a basis for the comparison, evaluation and criticism of various historiographic orientations.

Mode III provides a resolution to the antipathies of modes I

and II. Forged through the methodology of the positive dialectic, mode III consciously incorporates the strengths of its constituent modes, attempts to overcome the respective weaknesses of those modes, and achieves an investigative, explanatory and heuristic scope greater than the sum of its constituents. Thus it provides a superior model for historiographic theory and practice. Nevertheless mode III is not without its own limitations, as is evidenced in the fact that it is generating its own internal antipathies.

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CHAPTER I

INTRODUCTION

History, as a discipline, is still at a 'pre-paradigmatic' stage. This assertion is to be interpreted in an orthodox Kuhnian sense, where the state of the discipline is characterized by "a number of competing schools and subschools"[1] where "different men confronting the same range of phenomena, . . . describe and interpret them in different ways."[2] This is the notion of 'paradigm' as a single 'disciplinary matrix':

> 'Disciplinary' because it is the common possession of the practicioners of a professional discipline; 'matrix' because it is composed of ordered elements of various sorts, . . .[3]

At present, history is without a single, unifying, paradigm and historians are not "committed to the same rules and standards for [historical] practice."[4] There is, rather, a myriad of 'schools' of 'historical thought.' The divisions between these schools are significant and, at the very least, there is debate upon such meta-issues as: Is history a 'hard' or 'soft' social science? Can historical inquiry be subsumed under the methodological umbrella of the natural sciences or is it in need of unique procedures? Is history the study of human intentions and consciousness or is it more properly a description of empirical social phenomena? Does history provide a guide to present and future action, or is it lacking in all predictive potential?

Are cross-cultural and trans-historical histories possible, or must we acknowledge an impassible relativism? Is there such a thing as historical 'progress'? What do we mean by historical 'laws' and historical 'causes'? Does history have a 'meaning'? What is an historical 'explanation'?

Contention over such issues -- and our listing is far from exhaustive -- is symptomatic of a fundamental methodological impasse. These issues bring into question the very nature of historical inquiry and of the subject matter of history. As such, they reveal that basic epistemological and ontological questions have not been resolved. Until such resolution is forthcoming we may expect to see a continuation of the past and current fragmentation of historians into all-too-often competing and antagonistic enclaves. In short, Carr's[5] question of 'What is history?' is still being debated.

METHOD AND SCOPE

It is the ambition of this study to go one small step in the direction of resolving this debate. This task has five main dimensions.

First, the development of a typology of the ontological presuppositions found in the philosophy of science will be undertaken. These are metaconcepts; a priori statements on the very nature of reality. They are not restricted to the limited subject of 'historical reality,' but are, rather, cosmological in scope. Such ontological presuppositions comprise the very infrastructure of competing weltanschauungs and, as we shall see, become assumptions about the ultimate nature of historical reality. Thus they are the primary building blocks for the divisions between competing schools of historical thought.

Most importantly, such a typology will ultimately reveal the intimate affinity of specific assumptions in the philosophy of history with fundamental metaphysical assumptions found in the more general field of the philosophy of science. Such a typology will, in other words, be useful as a guide to understanding the differing viewpoints debated in the philosophy of science; differences and conflicts which manifest themselves in virtually all the social sciences.

Second, a typology of epistemologies congruent with the various ontological presuppositions will be developed. What is being termed a 'congruency' of ontological presupposition with epistemological methodology is both a logical [internally, formally, consistent] and a pragmatic [utilized by philosophers of science -- and, as we shall see later, of history] correlation. This will be an explication of types of inquiry; of method. These general epistemological differences provide the basis for comprehending the methods of inquiry considered to be 'legitimate' by the various schools of philosophers of science and history.

Such a schematization will provide what Radnitzky[6] would call an 'inventory' of the ways in which philosophers of science (and, among them, philosophers of history) have developed the methodological foundations of disciplines. It is only against this backdrop that the praxiological consequences of what is, to point, a purely formal and theoretical discourse become evident. This is the third dimension of our study.

The outstanding contribution of Thomas S. Kuhn to the philosophy of science is, in our opinion, his successful articulation of the position that a paradigm is not merely an ontological and epistemological orientation: it is also an axiological orientation. There is a social-psychological and sociological dimension to the so-called 'objective' endeavour of science (both physical and social science). There is an interplay between 'pure,' 'scientific' theory and the 'practice' of humdrum everyday life. Today, the philosophy and practice of science -- including the philosophy and practice of history -- can no longer convincingly employ any form of dualistic argument vis-a-vis the separation of scientific theory and social life.

This point has, however, been convincingly articulated for over a century. Since Marx, it has been possible to take "an unambiguous stand on the relations between the laws and the forms of thought and the rest of reality. . . . what goes on in the minds of men, both in substance and structure, is inseparable from what happens in their social relations and the physical world."[7] This orientation was most successfully applied to the examination of social theory, but the philosophy of science was still able to claim, for the 'hard' social sciences and the physical sciences, an 'objectivity' and 'neutrality' which, to use Habermas' phrase, "secure(d) the authority of science *in* _abstracto_."[8] Kuhn provided if not the most incisive then at the very least the most shattering attack on the notion of theory and practice as exclusive categories.

In his work, Kuhn has

> tried to insist, . . . that, though science is practiced by individuals, scientific knowledge is intrinsically a _group_ product and that neither its peculiar efficacy nor the manner in which it develops will be understood without reference to the special nature of the groups that produce it. In this sense my work has been deeply sociological, but not in a way that permits that subject to be separated from epistemology.[9]

Today, he asserts that "comparisons of the value systems that govern the practitioners of varied disciplines seem to me urgently needed at this time."[10]

This third aspect of our study begins (and the fourth aspect continues) to modestly undertake such an enterprise. Having outlined the formal, theoretical, ontological and epistemological 'backdrop' of philosophies of science, we now see what the social manifestations of such 'pure theory' are. Thus we delineate a congruent axiology which is compatible with the developed ontologies and epistemologies. Here we hope to make clear the 'link' between theory and practice; we hope to show how the 'world of theory' described in parts one and two serves as a blueprint for the 'world of men.' This axiological dimension illustrates how theory and method manifest themselves at the level of social life and reality.

We could choose any number of existential areas (religion, art, law, etc.) to illustrate the axiology of praxis. However, to keep our discourse within limits, we will restrict ourselves to investigation of three crucial areas of social existence.

First, we will discuss the 'educational' axiology of differing ontological and epistemological perspectives. Here we define education in terms of both what is formally recognized and defended as 'legitimate' knowledge, and how such knowledge can be obtained or transmitted. A discussion of education is most instructive for our purposes because education includes a conscious translation of ontology and epistemology into concrete social application. In education, we find the attempt to consciously transmit a world-view.

Next, we shall consider the ethics compatible with given ontological and epistemological propositions. Here we find the perhaps most socially permeating axiological consequences of competing perspectives on reality. Man's ethical orientation is a value statement on his 'time' and 'place' within a larger cosmological reality. Here we find man's definition of his existential self in axiological terms.

Last, the political/economic consequences of subscribing to a particular world-view are discussed. This examination is essential because it dramatically illustrates the concrete social functions that supposedly 'objective' and 'neutral' knowledge paradigms serve. In examining 'education' we are examining the formal 'translation' of ontology and epistemology into social reality; in examining 'ethics' we are examining the most subtle and permeating axiological consequences of theories; in examining the political/economic functions of knowledge paradigms we are revealing the power relationships which theory perpetuates through an ideological legitimization of various social structures and forms of social intercourse.

Having revealed the general axiological manifestations of our ontological and epistemological paradigms, we are better able to see the social and existential consequences of subscribing to given world-views. This facilitates and heightens our insight into the specific 'historiographic consequences' of knowledge paradigms. In this, the fourth aspect of our study, we clearly outline how the theory discussed in aspects one and two manifests itself specifically -- i.e. in actual historiographic practice. (The third section illustrates the general axiological form of social praxis such theory assumes.) This is the concrete level of historiographic praxis. We shall emphasize three main dimensions of the historiographic consequences of adopting specific ontological and epistemological positions and applying them within the discipline of history.

First, the 'object of study' is merely the reification of general ontological presuppositions into the concrete form of the subject of history. We ask: given our general presuppositions about 'what is reality?,' what is the specific 'historical reality?' This is seeking a statement on the subject of historical inquiry. Obviously, historians must claim to study something which exists. This 'historical reality' exists within a larger cosmological reality. It is the raw 'data,' the 'fact,' which the historian recognizes and works with.

Second, we will reveal the method of study that the historian utilizes in attempting to 'know' or 'understand' or 'describe' the subject of his curiosity. This is, again, a particular application of more universal epistemological procedures. We ask: now that we have answered the question of 'what is historical reality?,' how can we study this reality? Here our primary concern is with: a) criteria of 'objectivity'; b) what constitutes an 'explanation.'

Finally, we will outline the nature of 'historical action.' Having defined the subject matter of history, and having developed guidelines for the study of the historical subject, we now can properly ask: what can we 'do' with this knowledge? It is here that we truly address the 'uses of history.'

We recognize that at least one minimal pragmatic limitation must apply to a formulation of the 'purpose' of any discipline, regardless of how quixotic the goals of its practitioners may be. The claim must be defended that the discipline has a methodology which is, at least in theory, capable of producing answers to the questions it asks. The realm of possible questions one may ask may be as boundless as human imagination, but the realm of legitimate questions one may ask is limited by the analytic tools one recognizes as valid. To answer the question of 'what are the most sophisticated questions we can ask of history?' is to define the practical limits of the 'use of history.'

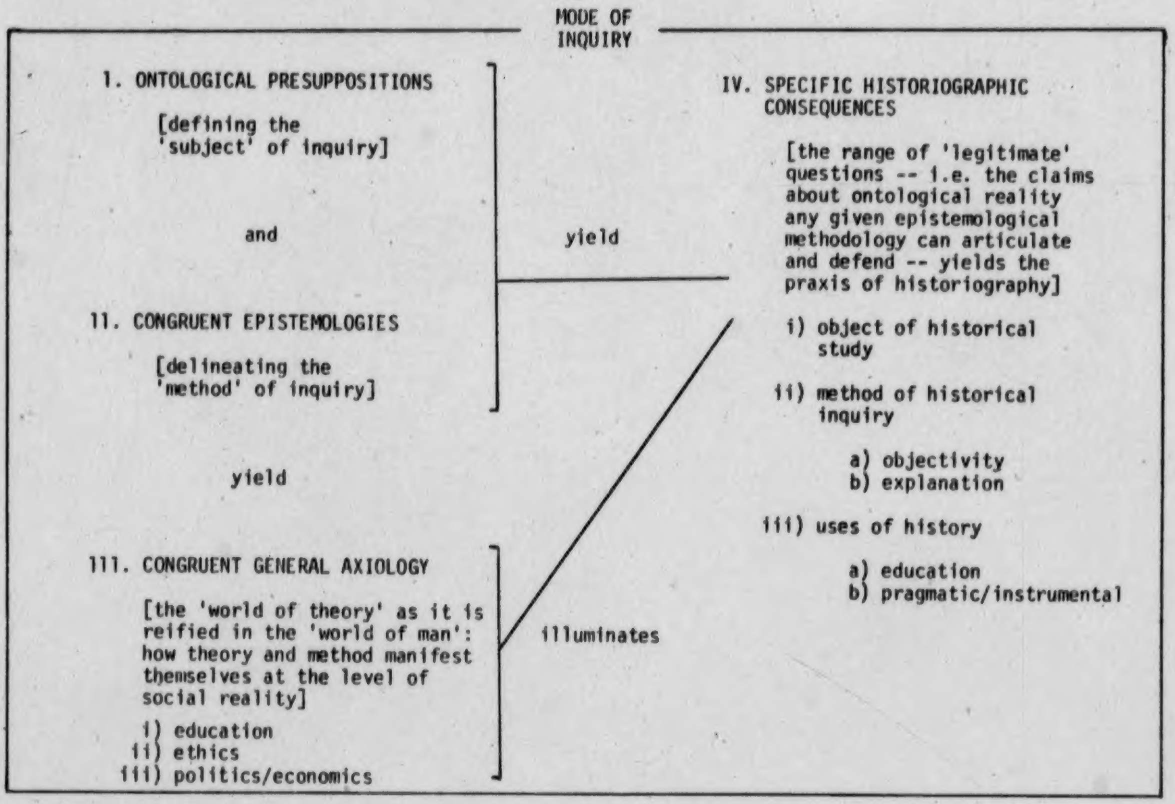
Thus aforementioned methodological tenets provide the de facto parameters of what may be called the uses of history. The scope of possibility is determined by the claims about ontological reality that any given epistemological methodology can articulate and defend. Here the educational and pragmatic/instrumental consequences of the 'historian's trade' are revealed. In other words, we answer the questions: what can we learn from history?; how can we use what we have learned -- in the sense of how can we apply what we have learned to serve as a guide to current action and future policy?

At this point, we will have both realized a formal schematization of existent perspectives on history (as both 'subject' and 'method' of study) and achieved insight into the axiological orientations of the various schools. We will have 'placed' the various [to use Stern's[11] phrase] 'varieties' of history into a framework.

The structure that such a framework will take we designate 'modes of inquiry.' Thus, a class of elements consisting of congruent ontological presuppositions, epistemology, axiology and historiographic consequences is a 'package' (which we are terming a 'mode') which defines the essence of what is in fact a 'world-view' [see figure #1]. 'History' can best be fully comprehended as a disciplinary theory and practice if we are so able to "'locate' it, as it were, on the map of knowledge"[12] and practice. We will develop three such modes.

Modes I and II will be cast as antithetical orientations which maintain essentially contrasting methodological characters. It is through the synthesis of mode I and mode II into mode III that these antipathies dissolve and a qualitatively new world-view

Figure 1: Mode of Inquiry (structural components)



MODE OF INQUIRY

1. ONTOLOGICAL PRESUPPOSITIONS

[defining the 'subject' of inquiry]

and

11. CONGRUENT EPISTEMOLOGIES

[delineating the 'method' of inquiry]

yield

111. CONGRUENT GENERAL AXIOLOGY

[the 'world of theory' as it is reified in the 'world of man': how theory and method manifest themselves at the level of social reality]

i) education
ii) ethics
iii) politics/economics

yield

illuminates

IV. SPECIFIC HISTORIOGRAPHIC CONSEQUENCES

[the range of 'legitimate' questions -- i.e. the claims about ontological reality any given epistemological methodology can articulate and defend -- yields the praxis of historiography]

i) object of historical study
ii) method of historical inquiry
  a) objectivity
  b) explanation
iii) uses of history
  a) education
  b) pragmatic/instrumental

of an explanatory breadth and investigative scope greater than even the sum of its parts emerges. It is argued that the historiographic criteria of mode III constitute a methodology which provides a superior model for historical practice. In so conceptualizing the plethora of historiographic orientations into three such 'mega-paradigms' it is not our claim that we have provided the singular acceptable typology for grouping diverse historiographic practices and methods and philosophies of inquiry. Rather, our contribution is more modest: by providing a framework through which various historiographic orientations may be viewed, we are providing at least a basis of comparison, evaluation and criticism. By providing the means for such a basis, our typology can serve both utilitarian and heuristic functions: clearly delineating, and comparing the adequacies of, three distinct 'paradigms' in the philosophy and method of history; moving practicing historians one more step along the path toward ever more refined and fruitful historiographic methodology.

Thus our answer to Carr's 'What is History?': history is (at least) three qualitatively different things. There are three world views within which a historian may find his/her intellectual and existential self, and each defines not only history but physical and social reality differently. This, however, does not mean that one need to remain forever 'trapped' within any one historiographic weltanschauung. Indeed, this work is undertaken with the same "three related premises" adopted by David Fischer in his exemplary Historians' Fallacies:

> first: that there is a tacit logic of historical thought; second, that this logic can be raised to the level of awareness; and third, that historical thinking itself can be refined by its intelligent and purposeful application.[13]

To paraphrase: the reason that the 'logic of historical thought' is 'tacit' is because it is so interwoven with general world-views; the bringing of this logic to the 'level of awareness' is best accomplished through the clear illumination of the fabric of these world-views (their ontological, epistemological and axiological components) and revealing the intimacy of the 'logic of historical thought' (historiographic consequences) with the permeating 'logic' of an entire world-view (the mode of inquiry); this enables us to 'refine' both the theory and practice of history in order that the boundaries separating today's competing 'schools' of history may begin to be broken down.

This brings us to the final dimension of our analysis. As noted, we consider the heuristic aspect of our endeavour to be central. Thus our delineation of three modes of inquiry is not to be construed as either an 'attack' on any specific historiographic orientation(s), nor a 'defense' of any mode of inquiry. Although we argue that mode III is a more refined, expansive, and methodologically superior mode of inquiry, we are not advocating a blind acceptance of mode III. We are not concerned with establishing any historiographic dogmas. Rather, our intention is to argue that mode III offers a sounder and more fruitful historiographic paradigm than either mode I or II, but that paradigm is itself revealing contradictions. We will therefore very briefly point out some of the major contradictions emerging in mode III in the hope that these may serve as guideposts to a future synthesis yielding a still more refined and expansive logic and method of historical inquiry.

Thus we stress the investigative nature of our exposition and seek only to further fruitful speculation aimed at improving the logic and method of the discipline of history. If our typology is successful in clearly illuminating both the points of convergence and conflict of various modes of historiography, then we have at least defined the problems that need solution. To build upon the points of agreement and to formulate metaconcepts within which disparities may find resolution through subsumption under more universal principles is to bring forth a new theory of historiography. Mode III is such a theory: because it is born through the methodology of the positive dialectic, it is not in opposition to other theories but is a synthesis of other theories.

But, as historians, we cannot stop there. Therefore, in our final chapter, we offer the most general outline of the emerging contradictions in mode III so that at least the first step toward the establishment of a reference point 'outside' -- so to speak -- the cognitive parameters of even the last of our three modes of inquiry will have been taken. We conclude with a highly speculative and theoretical discussion on how mode III's contradictions may possibly be resolved, and sketch our views on what form(s) the embryo of mode IV might assume. This point is crucial because, to rely on Kuhn again, we must go "outside" the cognitive bounds of the individual historiographic viewpoints and attempt to "see a new gestalt"[14] if we see as desirable the continued refinement of conditions of adequacy for the conduct of historical inquiry. We are reminded that when "schools disagree about what is a problem and what a solution, they will inevitably talk through each other . . . In the partially circular arguments that regularly result, each paradigm will be shown to satisfy more or less the criteria that it dictates for itself and to fall short of a few of those dictated by its opponent."[15] We believe the ultimate, and so very elusive, goal of philosophers and practitioners of history should be to constantly seek a paradigm which has conditions of adequacy which not only "satisfy more or less the criteria it dictates for itself" but also does not "fall short of a few of those dictated by its opponents." In short, we hope to go one small step in the direction of resolving the current fragmentation of thought and practice characteristic of the discipline of history. The ultimate purpose of this dissertation is to have it, hopefully, serve as such an heuristic aid.

LIMITATIONS

Two major problems are inherent in our task. First, such a macro-study begs the question: is it possible to formulate such a typology without distortion through reductionism?

It is, if the grouping is carefully concentrated upon only what may be termed 'fundamental' elements of the various varieties of the philosophy of science and history. The point is, in spite of real differences in the application and manipulation of ideas, it is possible to recognize that some systems of thought are, at core, based upon fundamental principles -- ontological and epistemological -- which are generically identical.

This is merely to say that although we certainly recognize significant differences between the ideas of, for example, Bentham and J.S. Mill, and also the ideas of Hegel and R.G. Collingwood, we can still, in justice, recognize the former as 'utilitarians' and the latter as 'idealists.' This is neither unwarranted reductionism nor an attempt to obfuscate real innovations in the thoughts of these men.

Indeed, it can be argued that it is of great instructional advantage to so categorize the 'general orientations' of thinkers. The significance and meaning of the basis of (in this case) Bentham's and Mill's thought becomes much more clear when their ideas are contrasted with another, 'outside' perspective -- such as Hegel's or Collingwood's idealism. It is then that the full intellectual and ideological force of a 'school's' orientation becomes evident. And it is then that the contributions of innovators within a school of thought can be appreciated, as they attempt to cope with problems and challenges which so very often originate with proponents of other, perhaps competing, orientations. [As Kuhn reminded us earlier: a paradigm may well "satisfy more or less the criteria that it dictates for itself," but we should not be surprised to see it "fall short of a few of those dictated by its opponent(s)."]

Thus, in our study, we endorse the method adopted by Arthur O. Lovejoy [although he applies it to the history of ideas] in his classic The Great Chain of Being. Lovejoy "breaks" philosophical systems "into what may be called their unit-ideas":

> One of the results of the quest of the unit-ideas in such a compound [i.e. the philosophical system] is, I think, bound to be a livelier sense of the fact that most philosophic systems are original or distinctive rather in their patterns than in their components. When the student reviews the vast sequence of arguments and opinions which fill our historical textbooks, he is likely to feel bewildered by the multiplicity and seeming diversity of the matters presented. . . . But the truth is that the number of essentially distinct philosophical ideas or dialectical motives is -- as the number of really distinct jokes is said to be -- decidedly limited. . . . The seeming novelty of many a system is due solely to the novelty of the application or arrangement of the old elements which enter into it. . . . I do not, of course, mean to maintain that essentially novel conceptions, new problems and new modes of reasoning about them, do not from time to time emerge in the history of thought. But such increments of absolute novelty seem to me a good deal rarer than is sometimes supposed.[16]

The second major difficulty to be overcome is one of language. This is a serious problem and its surmounting requires not only our great care in text preparation, but demands utmost diligence on the part of the reader. Even such prudence will not, we fear, fully eliminate all ambiguity from all parts of our presentation.

At the core of this problem is the fact that our typology is a typology of pervasive, comprehensive, world-views. Such world-views are not mere logical-abstract constructs; they are also systems of meaning. We are dealing with fundamentally different ways of defining reality itself. As Winch reminds us:

> Our idea of what belongs to the realm of reality is given for us in the language that we use. The concepts we have settle for us the form of the experience we have of the world. It may be worth reminding ourselves of the truism that when we speak of the world we are speaking of what we in fact mean by the expression 'the world': there is no way of getting outside the concepts in terms of which we think of the world, . . . The world is for us what is presented through those concepts.[17]

Winch continues and notes that "this is not to say that our concepts may not change, but when they do, that means that our concept of the world has changed too."[18] However, when such a change occurs, we must make what Toulmin calls a "language-shift." When we examine a new world-view, we are grappling with a qualitatively different orientation:

> When a theory is developed, all kinds of phrases which in ordinary life are devoid of meaning are given a use, many familiar terms acquire fresh meanings, and a variety of new terms is introduced . . .
>
> . . . [this] involves a language-shift, and one can distinguish between an account of the theory in the new terminology -- in 'participant's language' -- and an account in which the new terminology is not used but described -- an account in 'onlooker's language.'[19]

If the reader is content to interpret each world-view presented herein in "onlooker's language," he/she will have largely defeated the purpose of this exercise. To so interpret fundamental concepts is to throw away the key to possible resolution of the paradigm debates within the discipline of history. As best one can, one must try to make a "language-shift."

One must attempt to try to 'step into' these essentially 'closed' systems of thought -- closed in the sense that each world-view is a unique way of 'seeing' the world -- and try to perceive reality from a 'participant's' vantage.

Thus the major varieties of "systematic ambiguity" inherent in communication of meaning:

i contrast between the standpoints of speaker and interpreter,

ii contrast between the meaning of specific utterances (tokens) and that of the general (type) symbol,

iii attention to one rather than another use of language (e.g. to the expressive rather than the evocative or referential uses),[20]

may be avoided. In this manner the full theoretical and praxiological significance of each perspective may become realized. This is a necessary prelude to achieving the preliminary synthesis which is our final task.

Finally, in passing, we must caution that the term 'history' will be used in three distinct senses throughout our work. Alternately we will refer to history as a 'discipline,' history as a 'subject,' and histories as particular 'works' (i.e. Thucydides' History of the Peloponnesian War). Usage will shift back and forth without warning, but the context of usage will make clear which meaning is intended.

We now turn toward developing our typology of the differing, dominant, perspectives found in the philosophy of science generally and the philosophy of history in particular. Each orientation will be discussed, again, in terms of its ontological presuppositions, congruent epistemology, general axiology and historiographic consequences. To free our classificatory units from the connotations associated with prevalent contemporary terms (such as 'paradigms,' 'theories,' etc.) we shall simply label our perspectives 'modes of inquiry.' Although the term 'inquiry' carries an epistemological connotation, thereby perhaps overshadowing the ontological and praxiological components of each perspective, it is still preferable to other, seemingly more comprehensive, labels such as (modes of) 'thought,' 'perception,' 'study,' 'analysis,' 'ideas,' or 'ratiocination.' This is because the term 'inquiry' is somehow more 'dynamic' -- in the sense that it is readily suited to discussion of active praxiology, and it necessarily implies ontological considerations.

Footnotes - Chapter 1

[1] Thomas S. Kuhn, The Structure of Scientific Revolutions (2nd., enlarged, edition), Vol. 2, No. 2, of International Encyclopedia of Unified Science, editor-in-chief Otto Neurath (Chicago: The University of Chicago Press, 1970), p. 12.

[2] Ibid., p. 17.

[3] Thomas S. Kuhn, "Second Thoughts on Paradigms" in The Structure of Scientific Theories, ed. by Frederick Suppe (2nd. edition; Illinois: Board of Trustees of the University of Illinois, 1977), p. 463.

[4] Kuhn, Structure of Scientific Revolutions, p. 11.

[5] E.H. Carr, What is History?, Pelican Books (Harmondsworth, Middlesex, England: Penguin Books Ltd., 1964).

[6] Gerard Radnitzky, Contemporary Schools of Metascience (3rd., enlarged, ed., three volumes in one; Chicago: Henry Regnery Company, 1973), p. ix.

[7] George Novack, An Introduction to the Logic of Marxism (5th ed.; N.Y.: Pathfinder Press, 1971), p. 5.

[8] Jurgen Habermas, Legitimation Crises, trans. by Thomas McCarthy (London: Heinemann Educational Books Ltd., 1976), p. 84.

[9] Thomas S. Kuhn, The Essential Tension: Selected Studies in Scientific Tradition and Change (Chicago: University of Chicago Press, 1977), p. xx.

[10] Ibid., p. xxi.

[11] Fritz Stern, ed., The Varieties of History from Voltaire to the Present (Cleveland: The World Publishing Company, 1956).

[12] William H. Dray, Philosophy of History, a vol. in the Prentice-Hall Foundations of Philosophy Series, ed. by Elizabeth and Monroe Beardsley (Englewood Cliffs, N.J.: Prentice-Hall Inc., 1964), p. 1. We must note, however, that Dray is here drawing a distinction between speculative and critical philosophy of history -- a distinction which we are not employing.

[13] David Hackett Fischer, Historians' Fallacies: Toward a Logic of Historical Thought (N.Y.: Harper Colophon Books, Harper & Row, 1970), p. xv.

[14] Kuhn, Structure of Scientific Revolutions, pp. 110-112.

[15] Ibid., pp. 109-110.

[16] Arthur O. Lovejoy, The Great Chain of Being: A Study of the History of an Idea (Cambridge, Mass.: Harvard University Press, 1936), pp. 3-4.

[17] Peter Winch, The Idea of a Social Science and its Relation to Philosophy, a vol. in Studies in Philosophical Psychology, ed. by R.F. Holland (London: Routledge & Kegan Paul Ltd., 1958), p. 15.

[18] Ibid., p. 15.

[19] Stephen Toulmin, The Philosophy of Science: An Introduction, Harper Torchbooks (N.Y.: Harper & Row, 1960), p. 13.

[20] Dagobert D. Runes, ed., Dictionary of Philosophy (Totowa, N.J.: Littlefield, Adams & Co., 1962), p. 193.

CHAPTER II

MODE I: THE 'RECEIVED VIEW'

The theoretically compatible, instrumentally correspondent and mutually supportive perspectives which Suppe (following Putnam) groups under the category of 'the received view' constitute our first mode of inquiry.[1] The pre-eminence of this mode of thought in 20th century philosophy of science makes this perspective a most logical starting point for our analysis. As Suppe reminds us: The 'received view' exerted an almost 'total dominance' in the philosophy of science until very recently; it is a highly developed synthesis of not only contemporary but many 'earlier empiricisms'; and its highly refined epistemology and praxiology offer a comprehensive view of social/physical reality and programs to deal with that reality.

> For over thirty years logical positivism (or logical empiricism as it later came to be called) exerted near total dominance over the philosophy of science. The Received View, together with its incorporated borrowings from earlier empiricisms, provided the basic framework for posing problems about the nature of scientific knowledge and also imposed constraints on what would count as appropriate solutions to these problems: . . .[2]

The ascendance and success of Mode I, starting in the early 1920's, is initially focused upon the Vienna Circle: a gathering of philosophers, scientists and mathematicians. It was to the Vienna Circle that the designation 'logical positivist' initially applied, and some of the group's best known members were Moritz Schlick, Rudolf Carnap, Otto Neurath, Victor Kraft, Herbert Feigl, Philipp Frank and Gustav Bergmann. Rapidly, however, the term was extended to include the orientations of Bertrand Russell, G.E. Moore, Ludwig Wittgenstein, Carl Hempel, Ernest Nagel, Charles Morris, Gilbert Ryle, A.J. Ayer and Karl Popper.[3] This listing is of course far from exhaustive, meant only to indicate some of the more well-known (in North America) adherents to the basic tenets of Mode I. Major, overlapping, schools of thought included in this category are logical empiricism, scientific empiricism and the Unity of Science Movement. Physicalism, atomism, materialism and positivism are today less frequently employed categories for compatible orientations. The intellectual heritage of Mode I was concisely set out by the Vienna Circle in 1929 in the brief _The Vienna Circle: Its Scientific Outlook_ authored by Carnap, Neurath and Hans Hahn:

> After claiming that they were developing a Viennese tradition which had flowered at the end of the nineteenth century in the work of such men as the physicists Ernst Mach and Ludwig Boltzmann, and, in spite of his theological interests, the philosopher Franz Brentano, the authors set out a list of those whom they regarded as their main precursors. As empiricists and positivists they named Hume, the philosophers of the enlightenment, Comte, Mill, Avenarius and Mach; as philosophers of science, Helmholtz, Riemann, Mach, Poincare, Enriques, Duhem, Boltzmann and Einstein; as pure and applied logicians, Leibniz, Peano, Frege, Schroder, Russell, Whitehead and Wittgenstein; as axiomatists, Pasch, Peano, Vailati, Pieri and Hilbert; and as moralists and sociologists of a positivistic temper, Epicurus, Hume, Bentham, Mill, Comte, Spencer, Feuerbach, Marx, Muller-Lyer, Popper-Lynkeus and the elder Carl Menger. This list is surprisingly comprehensive,

> but it must be remembered that in most cases it is only a question of a special aspect of the author's works. Thus Leibniz is included for his logic, not for his metaphysics; Karl Marx is included neither for his logic nor his metaphysics but for his scientific approach to history. If we exclude contemporaries from the list, those who stand closest to the Vienna Circle in their general outlook are Hume and Mach. It is indeed remarkable how much of the doctrine that is now thought to be especially characteristic of logical positivism was already stated, or at least foreshadowed, by Hume.[4]

Diverse as the contemporary schools of thought included within Mode I are, and diverse as the intellectual heritage of this orientation is, it is still at base a cohesive orientation. As Bergmann (in speaking of logical positivism) notes: we are dealing with a "movement rather than a school, in the sense that those to whom the label is applied represent a broad range of interests and, on questions of common interest, often disagree with respect to what constitutes the right answer or about the proper method to arrive at it."[5] This 'movement,' in the words of Joergen Joergensen, is marked by a "convergence toward certain basic principles . . . [which] . . . form the common basis for the further discussion of still unsettled questions"[6] [i.e. Bergmann's areas of 'disagreement'].

Thus diversity must not cloud the real, underlying, unity of schools within the orientation of Mode I. It is indeed possible to see a fundamental harmony within the diversity of Mode I. Mode I provides, to borrow Radnitzky's terminology:

> an abstract model of an intellectual tradition; one might also say, it introduces an ideal-type for intellectual traditions. Several specific demands are put on the model: it should help bring some order into the myriad of things we

> find in the literature, such as presentations of problems, solutions proposed, methods, etc.; it should enable one to recognize major intellectual configurations, such as 'styles,' trends, problem-shifts, etc.; . . .[7]

As we have emphasized in the first chapter, what we are presenting in Mode I (and in each successive mode) are those crucial, fundamental, areas of agreement which reveal the existence of a 'movement' or 'tradition.' In doing so, we are careful to follow Bergmann's warning that such underlying agreement is revealed only "as long as one sticks to cautious generalities."[8] To such generalities characteristic of our first mode of inquiry we now turn: characteristics which both illustrate a weltanschauung encompassing many schools of thought which are often treated as separate; characteristics which will sharply contrast with those common to subsequent modes of inquiry we will develop.

ONTOLOGICAL PRESUPPOSITIONS

In discussing the ontology of mode I the term 'ontological presuppositions' -- which we defined on page two as "metaconcepts; a priori statements on the very nature of reality" -- would be strongly objected to by adherents to this mode of inquiry. Indeed, the essence of mode I ontology is best captured through negative definition: above all, this mode attempts to eliminate all ontological presuppositions, as it seeks to eliminate virtually all a priori statements. Mode I recognizes -- and only because of necessity -- but one axiomatic proposition: the universe must necessarily be regarded as having an empirical existence. Mode I is thus a wholly 'materialistic' orientation:

> The basic proposition of materialism refers to the nature of reality, . . . It states that matter is the primordial substance, the essence, of reality.[9]

However, even the (postulated) existence of this wholly objective reality (which, of course, includes man; man as a material being) would not be considered an axiom in the true sense of the term. Such a proposition is more properly, in the perspective of mode I, not in any way a concession to 'speculation' [which is to be avoided at all costs]. This admittance of an empirical reality -- the firm grounding of ontology in materialism -- is justifiable if we contemplate the eloquent words of Nelson Goodman:

> You may . . . protest that there are more things in heaven and earth than are dreamt of in my philosophy. I am concerned, rather, that there should not be more things dreamt of in my philosophy than there are in heaven or earth.[10]

To ensure that we do not populate reality with phantoms, we may only allow ourselves the least misguiding and most unavoidable 'metaphysical' luxury: a recognition of what is manifestly obvious; a bowing before the most 'trivial' of all self-evident truths. In the words of Karl Popper:

> In my opinion, the greatest scandal of philosophy is that, while all around us the world of nature perishes -- and not the world of nature alone -- philosophers continue to talk, sometimes cleverly and sometimes not, about the question of whether this world exists. . . .
>
> ***

> Under these circumstances there is a need to apologize for being a philosopher, and more particularly for restating . . . what should be a triviality, such as realism, the thesis of the reality of the world.[11]

This ontological position provides the basis for mode I's subsequent "attack on metaphysics"; the perception of metaphysics as a "disease"[12] which threatens not only philosophy but indeed man's generalized ability to think in the best manner possible. It constitutes mode I's epistemological foundation.

CONGRUENT EPISTEMOLOGIES

Such a starting point already anticipates its own problems and solutions. That is, ontology defined empirically necessitates an observation-based epistemology. If we consider the empirical reality of the world (our ontological presupposition) to be non-problematic, then our ability to 'know' that reality becomes the central issue in the philosophy of science. As Novack asserts:

> Empiricism is based not so much upon a particular view of the world as upon a statement concerning the ways and means of acquiring knowledge of the world. It is in fact a special theory of knowledge — an epistemological theory. The primary principle of empiricism is that all knowledge is founded on experience of the senses.[13]

Thus the only genuine 'problem' such an epistemology recognizes is a logical problem. Put another way, the question is: are we perceiving empirical reality as it 'really' is, or are we being misled by our senses, observation devices, or in our understanding of data? As Popper tells us:

> our observations are highly complex and not always reliable though astonishingly excellent decodings of the signals which reach us from the environment.[14]

The problem then becomes to make them 'reliable.' Thus epistemology becomes wholly the "theory of scientific knowledge" because "scientific knowledge belongs to . . . the world of objective theories, objective problems and objective arguments."[15] It is at this point that

> the Received View was broadened into a general doctrine of cognitive significance: the only meaningful discourse was that done either in terms of phenomenal language or using terms which were abbreviations for (that is, could be rephrased equivalently as) expressions in phenomenal language; any assertions failing to meet these conditions were metaphysical nonsense. This doctrine was summarized in the slogan, "The meaning of a term is its method of verification," since theoretical terms were defined in terms of the phenomenal conditions by means of which assertions employing them could be verified. The doctrine was known as the verificiation theory of meaning.[16]

In Hempel's words:

> the fundamental tenet of modern empiricism is the view that all non-analytic knowledge is based on experience. Let us call this thesis the principle of empiricism. Contemporary logical empiricism has added to it the maxim that a sentence makes a cognitively meaningful assertion, and thus can be said to be either true or false, only if it is either (1) analytic or self-contradictory or (2) capable, at least in principle, of experiential test. According to this so-called empiricist criterion of cognitive meaning, or of cognitive significance, many of the formulations of traditional metaphysics and large parts of epistemology are devoid of cognitive significance -- . . .[17]

We can readily see that striving to meet Popper's above noted demand for "objective theories, objective problems and objective arguments" involves more than a naive cautioning to 'check our facts.' Ours is a problem of somehow 'connecting' the very symbols we think in with a truly objective referent in empirical reality. Thus the great concern of mode I with linguistic analysis (as Suppe states, all our expressions must be "expressions in phenomenal language") and with logic. Crucially, logic never defines meanings; it may only 'connect' phenomenally defined terms:

> At first sight this would seem to present a difficulty. Philosophical systems which employ logical methods almost exclusively would undoubtedly be expected to produce non-empirical results. If, however, logic is taken simply as a method of connecting meanings it is not difficult to reconcile logical methods with empirical results. If logical formulae, in other words, assert nothing about the meanings of propositions, but simply show how such meanings are connected, then an empiricism based on a logical analysis of meanings is not inconsistent.[18]

We can see there are two, what may be called, 'checks' that mode I uses to ensure the 'objectivity' of this mode of inquiry: an 'outside' reference always exists because an independent, objective, reality is always present -- therefore we can check our 'facts' and 'theories' against it. Thus

> All statements of a higher order, including the most abstract scientific hypotheses, were in the end nothing more than shorthand descriptions of observable events.[19]

Secondly, logic is the tool whereby we can ensure that our method of 'verifying' our facts and theories in objective reality is valid. Thus refining logic becomes an imperative because "truth is correspondence with the facts [i.e. reality]"[20] and objective knowledge therefore "consists of the logical content of our theories, conjectures and guesses."[21]

This 'criteria of correspondence,' combined with the axiomatic proposition that ontology must have an empirical formulation, results in the methodological ideal of achieving a full description. The most successful elucidation of exactly what constitutes a full description [and therefore gives us the most comprehensive linguistic formulation, i.e. a "truth" statement, which is in "correspondence with the facts" as Popper would like] is the so-called Popper-Hempel model of explanation.[22] The Popper-Hempel model is invaluable not only because it outlines the formal criteria for establishing "conditions of adequacy, which may be divided into logical and empirical conditions"[23] (i.e. the twin pillars of mode I epistemology). The model also clearly recognizes that in achieving such a description we are in fact establishing a 'scientific explanation.' This is where the full epistemological import of mode I is realized, and where it takes on full cosmological significance.*

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* Although the Popper-Hempel model has undergone modification through the efforts of both Popper and Hempel,[24] the essence of the theory is as follows:

The model deals with 'scientific inquiry'; a term which includes both empirical and non-empirical sciences. A necessity for referring to empirical evidence characterizes the former, and the natural and social sciences are here represented. Non-empirical sciences, such as pure mathematics and logic, do not require empirical references.[25] Although Hempel has addressed the non-empirical sciences,[26] the main concern of both Popper and Hempel has been empirical science -- including history.

The first necessary condition for empirical scientific inquiry is that an empirical event must have occurred.[27] That given, the task becomes the "explaining" of the occurrence of the empirical phenomena.[28] To effect an explanation, two

Classical empiricism asked only 'how' -- or, more properly, under what conditions -- a phenomenon occurs. This was a wholly

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components are necessary: the explanadum and the explanans. The former is the sentence which describes the phenomenon we wish to explain (it is not the phenomenon itself); the latter is the "class of those sentences which are adduced to account for the phenomenon." The explanans has two subclasses: (i) sentences which state specific antecedent conditions, (ii) sentences which represent general laws.[29]

Both the explanandum and the explanans must satisfy specific "conditions of adequacy." These are of two types: logical and empirical. The logical conditions are three: (i) "The explanandum must be logically deducible from the information contained in the explanans," (ii) "The explanans must contain general laws," (iii) "The explanans must have empirical content; i.e. it must be capable, at least in principle, of test by experiment or observation." The single empirical condition of adequacy is that the "sentences constituting the explanans must be true."[30]

The above is the general form of the Popper-Hempel model, and that model is an attempt to limit the components of an explanation to two groups of "explanatory facts": particular facts, and uniformities expressed by general laws.[31] In essence, an explanation can take only two concrete forms. It can be deductive-nomological (what Dray coined the "covering-law" model of explanation[32]), or it can be inductive-nomological (what Hempel usually terms "probabilistic" explanation).[33]

The deductive model affects "deductive subsumption of the explanandum under principles which have the character of general laws."[34] Schematically:[35]

explanans	$C_1\ C_2 \ldots C_k$	Statements describing the particular facts involved
	$L_1\ L_2 \ldots L_r$	General laws
explanandum	E	The event (as we have described it) to be explained

The inductive model is so named because the general laws are in statistical rather than universal form, therefore "the truth of the explanans makes the truth of the explanandum not certain . . . but only more or less likely."[36] This model is descriptive analysis, designed to avoid the troublesome concept of causality. Mechanistic descriptions [sequential descriptions of contingencies over time, often yielding recognizable 'patterns' which were usually described mathematically] avoided implication of ontological or sequential priority. Any inference that one entity within a whole field of contingencies 'caused' a particular phenomenon under study or 'caused' a chain of events resulting in the said phenomenon was avoided. Such assertions stipulated what Hume terms a "necessary connection" among phenomena. All we can know is that "one event follows another; but we never can observe any tye$_{[sic]}$ between them. They seem conjoined but never connected."[39]

Hempel criticizes those "'explanations' [which] have the character of straight-forward descriptions: they tell us that, rather than why, certain things are the case."[40]

The degree to which attempting to infuse the notion of causality into empiricism is radical is illustrated by Hempel and Popper themselves. For example, Hempel has qualified his views by stating that his models of explanation "account for a given phenomenon . . . by showing that it came about in accordance with

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identical with the deductive-nomological in form, but "admits of degrees, whereas deductive-nomological explanation appears as an either-or affair."[37]

Beyond these two models, Hempel notes another two: the "elliptically formulated" explanation and the "partial" explanation. Both, however, can be subsumed under the former pair.[38]

certain general laws or theoretical principles . . . in the sense that its occurrence can be inferred from those laws taken in conjunction with a set of statements . . . which describe certain empirical circumstances."[41] (This seems to tone down the 'causal' imperative to something more like a description of how events are 'conjoined'.)

Popper is even more careful and notes that causal explanations themselves presuppose the 'principle of causality' and rejects -- as would Hume -- such a principle as metaphysical. However he also rules out the a priori rejection of causality, and in the end concludes that causal explanations should be formulated whenever possible.[42]

These qualifications not-withstanding, the Popper-Hempel model is the most highly articulated version of what William Dray calls the "covering-law" model of scientific explanation. It constitutes the most refined attempt to make mode I the dominant mode of inquiry, crossing all disciplinary lines and extending to all facets of human intellectual endeavour.

> . . . there is at least one philosophical problem in which all thinking men are interested. It is the problem of cosmology: the problem of understanding the world -- including ourselves, and our knowledge, as part of the world. All science is cosmology, . . .
>
> . . .
>
> . . . I am quite ready to admit that there is a method which might be described as 'the one method of philosophy.' But it is not characteristic of philosophy alone; it is, rather, the one method of rational discussion, and therefore of the natural sciences as well as of philosophy. The method I have in mind is that of stating one's problem clearly and of examining its proposed solutions critically.

> I have italicized the words '_rational discussion_' and '_critically_' in order to stress that I equate the rational attitude and the critical attitude.[43]

Hempel echoes Popper's sentiments:

> To explain the phenomena in the world of our experience, to answer the question 'why?' rather than only the question 'what?,' is one of the foremost objectives of all _rational inquiry_; and, especially, _scientific research_ in its various branches strives to go beyond a mere description of its subject matter by providing an explanation of the phenomena it investigates.[44]

Thus extended well beyond a theory of 'science' into a general world-view, we may examine some of the social manifestations of the weltanschauung of our first mode of inquiry.

CONGRUENT GENERAL AXIOLOGY

(i) Education

In the form of an educational doctrine, mode I yields both a wholly unambiguous definition of 'knowledge' and a clearly defined pedagogical program.

In consequence of its ontological and epistemological positions, mode I will recognize only empirical propositions as meaningful. The only 'legitimate' -- i.e. 'true' knowledge -- is empirical knowledge: knowledge subject to test through the 'verification criterion.' "All cognitively significant discourse about the world must be empirically verifiable."[45] Education therefore has a dual task.

On the negative side, it must contribute to the purging of all vagueness which is the legacy of our 'metaphysical' orientations.

The positive aspect of the task is to replace such vacuous concepts with ones which are empirical, observation-based, verifiable in experience. As we have seen, the 'ontological problem' is considered a red herring in the perspective of mode I. Consequently, to engage in prolonged debate over just which empirical knowledge is to be admitted (the 'positive' aspect of education's task) is not problematic: all empirical knowledge is equally 'valid,' equally 'true,' and therefore equally worthy of being 'known.' More immediately crucial are, first, the negative dimension of education and second, the pedagogical consequences necessitated by mode I epistemology.

As has been noted, a large portion of the efforts of adherents to mode I has gone toward identifying, with the objective of eradicating, what are deemed to be 'meaningless' (i.e. 'metaphysical') concepts from the stockpile of symbols we think in. That has been a major thrust of linguistic analysis. But perhaps the most eloquent, expansive and successful recent attack on such metaphysical concepts is B.F. Skinner's Beyond Freedom and Dignity.[46] His assault on "mentalism," "hypothetical inner man," "traits of character," "feeling," and "consciousness" clearly illustrates what mode I is reacting against. Coincidentally, this representative work delineates the program by which knowledge is to be transmitted.

An empirical epistemology yields a behavioral psychology. It is correct that "all logical positivists and virtually all scientific semanticists are behaviorists."[47] Skinner's well-known model of "operant-conditioning," his tenet that "behavior is shaped and maintained by its consequences,"[48] his insistence that only empirically observable behavior and not 'feelings' or 'states of mind' are of import in the study of man, and his emphasis upon a 'science' of behavior are essentially a restatement of the basic tenets of mode I epistemology. Thus education (as pedagogy) must be "stated in behavioral terms: a teacher arranges contingencies under which the student acquires behavior which will be useful to him under other contingencies later on."[49]

In this perspective, education becomes wholly concerned with, for lack of a better term, 'content.' Only 'behavior,' in the form of 'demonstrating' that one has 'learned' certain 'facts' becomes the 'measure' of 'education.'

Most conspicuously, and of singular importance, is mode I's inability to establish any sort of reference point from which we may make any 'valid' and 'defensible' [within the meaning these terms assume in the perspective of mode I] 'judgment' on the 'value' of what is 'learned' (i.e. demonstrated through behavior). In other words, we are left with little clue as to which (empirical) knowledge is to be preferred (or 'valued' over) other knowledge. To address and illuminate this issue we turn to the ethical perspective of mode I.

(ii) Ethics

The ethical orientation of mode I is fruitfully approached through consideration of the categories of 'judgement' outlined by John Gunnell:

> The logical empiricist states that 'the basic judgments of human beings may be divided into three fundamentally different categories:
> (1) logical judgments
> (2) factual judgments
> (3) value judgments.'[50]

Categories 1 and 2 are readily recognized as the aforementioned twin pillars of the world-view of mode I: 'Factual judgments' are merely those which are, in Popper's terms, in "correspondence with objective reality." 'Logical judgments' can be of two sorts. They can be of the variety detested by mode I practicioners -- purely formal, semantic, syllogistic exercises. These are discounted as 'meaningless' (because the terms are not, as Suppe states, in "phenomenal language"). Alternately logical judgements can be, as Weinberg reminded us, an exercise in "connecting meanings." If the terms of the propositions are cast wholly in 'phenomenal language,' then logic becomes merely a tool with which we ensure that we are validly 'corresponding' our assertions with the objective 'facts.' [As we previously noted: "truth is correspondence with the facts" and objective knowledge therefore "consists of the logical content of our theories, conjectures and guesses."[51]] This latter perspective on logic is the one adhered to by mode I.

Thus we must qualify Gunnell's statement. Logical and factual judgements may be "fundamentally different categories," but logic can and does have a great role to play in mode I thought. 'Value judgments,' however, do indeed form an exclusive category. Mode I offers no method for either formulating or evaluating questions in the realm of values.

The reason for this can be traced to mode I's insistence that 'metaphysical' -- i.e. non-phenomenal -- terms are meaningless, and its recognition of only observation-based verification. As D.H. Monroe questions:

> We know how to justify the empirical assertions that are the starting-point of reasoning about matters of fact. We justify these by reference to observation, the evidence of the senses. Moral propositions cannot be verified by the evidence of the senses. Are we then ever justified in making them? Moreover, what do such assertions mean? If words like 'ought,' 'good,' 'right' do not refer to anything that can be observed, what do they refer to?[52]

The answers to Monroe's questions are: we are never justified in making moral propositions; words like 'ought,' 'good,' etc. are meaningless for they do not have empirical import. We can only appeal to objective reality to test the validity of our propositions, and mode I insists that value statements are not phenomenal formulations. This is the fundamental distinction between 'fact' and 'value.' As Bergmann stresses:

> A statement of fact says something about the object or objects it mentions; and, depending only on the properties of these objects, it is either true or false. A value judgment is misunderstood if it is taken to ascribe a property to the object, act, or situation it mentions in the same sense in which a statement of fact is such an ascription; it is, therefore, literally neither true or false.[53]

Thus logic is of no use to us because mode I will only allow logic to "connect meanings of propositions." However, mode I defines 'meaning' phenomenally and "logical formulae" must, without exception, "assert nothing about the meanings of propositions."[54]

Because 'value' propositions cannot be cast in phenomenal language we must recognize the "impossibility of logically deriving values from facts."[55]

This necessitates an ethical relativism as, following the above form of argument, "the ethical relativist claims it is logically impossible to give good reasons . . . for or against moral judgments."[56] 'Good reasons' are phenomenally cast logical formulations and thus Hume's long-standing dictum "'ought' does not follow from 'is'"[57] survives. This "impossibility of logically deriving values from facts" ensures that ethics must be treated as a "separate enterprise."[58] We must hasten to add with Ayer that

> To say that moral judgments are not fact-stating is not to say that they are unimportant, or even that there cannot be arguments in their favor. But these arguments do not work in the way that logical or scientific arguments do.[59]

Moral judgments simply cannot so 'work' because there is

> . . . no [empirical; phenomenal] ground for preferring kindness to cruelty -- one's actual preference for the former is on par with one's preference for asparagus over artichokes -- and no rational justification for objecting to the Nazi theories of politics or the horrors of the concentration camps which were the instruments of their application.[60]

Joad immediately goes on to assert that "There are many objections to this view, but the most potent is that nobody really holds it."[61] Indeed adherents to mode I do not hold the opinion that (to use his example) the holocaust cannot be objected to; but they do recognize that such objection is not scientifically valid objection. By way of illustration we may turn to Bertrand Russell. Russell epitomised the mode I orientation and was at the same time one of the finest voices for pacificism as well as an early, very active, and most eloquent denouncer of Nazism. He gives us an extremely clear insight into the difficult place of ethical thought within the mode I framework. Indeed, reconciling ethical judgments with mode I thought is what may be called 'Russell's dilemma.' His "What I Believe" is profound in its simplicity, humility, and the questions it raises:

> Man is a part of Nature, not something contrasted with Nature. His thought and his bodily movements follow the same laws that describe the motions of stars and atoms . . .
>
> There have been at different times and among different people many varying conceptions of the good life. . . . On such a matter no argument is possible. I cannot, therefore, prove that my view of the good life is right; I can only state my view, and hope that as many as possible will agree. . . .
>
> I do not think there is, strictly speaking, such a thing as ethical knowledge. . . .
>
> Outside human desires there is no moral standard.
>
> Thus, what distinguishes ethics from science is not any special kind of knowledge but merely desire. The knowledge required in ethics is exactly like the knowledge elsewhere; what is peculiar is that certain ends are desired, and that right conduct is what conduces to them.[62]

(iii) Politics/Economics

Frustrating as it is, Russell's dilemma none-the-less leads us to what -- at the level of social intercourse, exchange and structure -- adherents of mode I deem to be the greatest 'virtue' [if this term can even appropriately be used in any discussion on mode 1] of this orientation. In the realm of both social and intellectual life, mode I wages a fierce and constant battle against two antagonists: dogmatism and ideology. Dogmatism understood as uncritical belief in some principle; ideology as the perpetuation of such belief(s). In the focus of mode 1 both are inseparably bound, and both are attacked.

These notions are attacked because they establish 'authority' which is not questionable. Unable to be critically assailed, authority ensures its own perpetuation. Mode 1's rejection of dogmatism and ideology is, again, directly a consequence of, and fully compatible with, its epistemology:

> Authority rests upon belief and most of the beliefs that have stirred men's minds have had, or have professed to have, metaphysical foundations. Destroy the foundations and you increase the difficulty of believing in the existence of any order of reality other than that which science studies.[63]

We saw, in our discussion on Mode 1 epistemology, that the metaphysical shackles upon philosophical inquiry were really an obstruction to all of what Popper terms "rational inquiry." (Rational inquiry, in turn, was equated with "scientific" inquiry.) We now see that a metaphysical orientation permeates all of our social consciousness. The form of argument used in the philosophical context is therefore essentially the same as that utilized in mode 1's sociological critique.

Precisely because we cannot "logically derive values from facts," mode 1 reminds us that these must always be "separate enterprises."[64] As most of our beliefs are in the realm of values -- our most cherished and fundamental political, economic, religious, educational, etc. beliefs -- mode 1 insists that we cannot 'know' which specific political system, which economic theory, which religious ideal or which definition of an 'educated' man is in fact 'objectively' correct. We cannot know this because these are all what Russell called "views of the good life"[65] and consequently must fall under ethical relativism. A pretense by any particular political, economic, educational, etc. view to being 'true' is simply nonsense: Truth is "correspondence with the facts"[66] and no "phenomenal formulation"[67] of value statements is possible. Thus the 'authority' of 'belief' systems is a wholly arbitrary and irrational [not subject to empirical verification] one.

The task of mode 1, as a world view, becomes the discrediting of all dogmatisms -- and their ideological perpetuation -- in any pretentions to being 'truth' statements. Of course, as 'value' statements they are perfectly admissible. However, with Russell, we realize that "on such matters no argument is possible"[68] [i.e. Popper's "objective" argument[69]]. Such debates are over mere preferences; as Joad[70] stated, equivalent to debating the preference of artichokes over asparagus. If we but realize this, we could be freed from the hold of arbitrary values which today pose for objective truths. To take this step, it is claimed, is to free oneself from the irrational domination of any particular value system. As Russell tells us: "The triumphs of science are due to the substitution of observation and inference for authority." To ensure that such development is generalized and maximized in the broader areas of human concern, we must heed the warning that "every attempt to revive authority in intellectual matters is a retrograde step." The ultimate benefit of such an orientation "is that it enables us to live without the delusion of subjective certainty."[71]

Ironically, the reality of the situation is that this demand for objectivity inverts upon itself. Although the scientific orientation of mode 1 leads to ethical relativism, relativism itself quickly becomes reified into an all-encompassing, paramount, value. How this comes about is found in analogy to a phrase of Rousseau's we particularly favor: "The only habit the child should be allowed to contract is that of having no habits."[72] In like manner mode 1 is haunted by the realization that

> there is something paradoxical in the notion of relativism as a theory at all, for when we ask whether the theory itself is relative or absolute, we immediately run into trouble. If it is absolute, then we have a kind of absolute relativism and that would seem to be a contradiction in terms. On the other hand, if the theory is merely relative, it loses its pungency and becomes trivial . . .[73]

This is not a barren semantic distinction of the variety favored by the 'metaphysical' formal logicians so distrusted by adherents of mode 1. It is a real problem and yields something much like the ontological proposition -- the "thesis of the reality of the world"[74] -- which mode 1 reluctantly is forced into admitting (in spite of its loathing for a priori assertions). Just as Popper labeled that "thesis" a "triviality," so is the enshrining of 'relativism' into an over-arching 'value' deemed a triviality. It is, however, a very necessary triviality. It is a position mode 1 is really forced into by the contingencies of its entire epistemological perspective. This is realized by its adherents and some of the most powerful literature of mode 1 has been aimed directly at the need to keep, to borrow Popper's term, our society "open"[75] to the full public debate of all issues. This is fully a political imperative; one inseparable from the welfare of the human race and one derived from mode 1's epistemological 'scientific' imperatives. We are warned that

> the objectivity of science, and so science itself, . . . are both based upon free competition of thought; that is upon freedom. If the growth of reason is to continue, and human rationality to survive, then the diversity of individuals and their opinions, aims, and purposes must never be interfered with (except in extreme cases where political freedom is endangered).[76]

From this base the ethical perspective of mode 1 is expanded into a general social orientation rooted in the value of relativism. The concrete forms such a value assumes reveal the very real social functions of what is deemed to be a wholly objective mode of inquiry.

In its political manifestation, ethical relativism and intellectual 'openness' is translated into a democratically conceptualized notion of 'freedom.' Because we can never confidently form a hierarchy of values, our political task is to ensure that all ideas have access to the public forum. Thus mode 1 enshrines freedom of thought and speech, and ethical relativism is formalized into (preferably) constitutional guarantees that such freedom is protected. This is the reification of ethical relativism: we cannot objectively condemn or support any value as we have no basis for deciding between statements of value [unlike statements of fact]; to ensure the unmolested existence of values it is maintained we must enshrine one over-arching value, the value of ethical relativism which is politically named 'freedom' [as Popper says above, we must protect against "extreme cases where political freedom is endangered"]. Thus, "the politician should limit himself to fighting against evils [i.e. dogmatism -- values posing as empirical truths] instead of fighting for 'positive' or 'higher' values."[77]

The pressing question then becomes, again, which political values should we choose? Mode 1 cannot and will not provide an answer. As Russell has told us, "outside human desire there is no moral standard" and there are many views on the "good life."[78] Thus Popper speaks for mode 1 when he tells us that "it is up to us to decide what shall be our purpose in life, to determine our ends."[79] In pursuing such ends, however, the clear distinction between the realms of fact and value once again is a paramount concern:

> Facts, whether those of nature or those of history, cannot make the decision for us, they cannot determine the ends we are going to choose. It is we who introduce purpose and meaning into nature and into history. Men are not equal; but we can decide to fight for equal rights. Human institutions such as the state are not rational, but we can decide to fight to make them more rational.[80]

It is the 'decisions' we make and the 'ends' we choose which will ultimately provide the answer to Skinner's challenge: "we have not yet seen what man can make of himself."[81] To guarantee that we have the time and opportunity to so 'make ourselves' is a political task. The essentially negatively defined social role of politics -- the aforementioned "fighting against evils"[82] -- is meant to perpetuate the situation wherein "Western civilization is an essentially pluralistic one." To abandon pluralism in favor of "monolithic social ends would mean the death of freedom: of the freedom of thought, of the free search for truth, and with it, of the rationality and the dignity of man."[83]

This political notion of freedom is also fundamental to the economic perspective of mode 1. The two are inseparable and become fused in the form of capitalism. Such a development is not in any way contrived; it is merely, as Friedman acknowledges, a bowing to the recognition "that there is an intimate connection between economics and politics, that only certain combinations of political and economic arrangements are possible."[84] This perceived, it soon becomes "clear how a free market capitalist society fosters freedom."[85]

The linkages between laissez-faire economics and a pluralistic political ideal center upon two central tenets: political criteria of 'freedom,' and reconciling the problem of political power. As Galbraith notes, "[a major] appeal of the competitive model was its solution of the problem of power. . . . free competition, so called, has for long been a political rather than an economic concept."[86]

This becomes apparent if we recall that political freedom is but a special case of mode 1's ethical relativism. It is the reification of relativism in the form of the pluralism of an "open society." In like manner, "economic freedom, in and of itself, is an extremely important part of total freedom."[87] 'Total freedom' is a metaconcept embodying all the aforementioned characteristics of "rational inquiry" -- as against metaphysical beliefs and the dogmatisms they engender. So, negatively defined, economic freedom is but another component of an arsenal for fighting against 'authority.' Positively conceptualized, it is part of the general process of 'rational inquiry' through which man may continue to "make himself."[88] Thus:

> The basic feature of the American [capitalist] economy is the same as that of the American [pluralist] political system -- liberty or freedom under the law. This means that the range of decisions individuals can make in relation to their economic activities is wide -- wider, probably, than is the case in any other country; it also means limits and rules determined by the laws of the country. It means constitutionalism, checks and balances, the impossibility for any given interest to have total sway, acceptance of decisions taken by democratically elected authorities.[89]

Keeping the "range of decisions" as broad as possible [the positive aspect] is merely a translation into economic terms of Popper's aforementioned insistence that "the diversity of individuals and their opinions, aims and purposes must never be interfered with."[90] A free market system facilitates precisely this task. It is based on consumer demand, even though it is admitted that such demands can be "controversial, frivolous and even selfish."[91] However these preferences, regardless of how 'frivolous' we may consider them to be, are 'value' preferences and we cannot judge them because they fall outside the scope of objective decisions. Thus relativism and pluralism is protected, as basing an economy on consumer demand "gives people what they want instead of what a particular group thinks they ought to want."[92] Just as democratic pluralism ensures freedom of ideas, so capitalism protects the individual's "freedom to choose what to do with his money and his leisure, to decide what he wants to read, to eat, to enjoy. These are the accepted freedoms of western civilization."[93]

The negative dimension, keeping any one orientation from obtaining "total sway," is analagous to mode 1's political irony: i.e. the necessity for one supreme political tenet -- the tenet that we must not allow supreme political tenets as all opinions must have free and open access to expression and debate. As Friedman argues, in the logic of mode 1, "political freedom means the absence of coercion of a man by his fellow men." Consequently, "the preservation of freedom requires the elimination of such concentration of power to the fullest possible extent and the dispersal and distribution of whatever power cannot be eliminated."[94]

The great problem is, "if economic power is joined to political power, concentration seems almost inevitable."[95] Thus the economic and political spheres, although based and operating upon the same principles, must remain separate. This is merely an extension of the argument for pluralism, and illustrates that a "system of economic freedom [is] a necessary condition for political freedom."[96]

Thus we see, once again, the reluctance of mode 1 to impose any one ideal results in the institutionalization of the ideal of consumer supremacy and open competition. In reality, mode 1 supports a free market economic system. As long as they are 'open' all particular forms of production, consumption and exchange are merely 'preferences' and as such are not objectively debatable. All that can be objectively known are the optimal, maximum and minimal parameters of the physical aspects of these economic preferences: i.e. we can study the efficiency of the system, test the objective qualities of its products, analyze the market, etc. This we can do, but we can never judge the value of the system itself: how 'just' is the distribution of goods? Are business practices 'fair'? Are the physical products of the system 'desirable' commodities? etc. Ensuring that the economic mode is a free enterprise system [because the only 'value we can defend is pluralism] is as far as 'rational inquiry' will take us.

Now, having examined the scope and force of mode 1 from the above variety of reflections, we go on to the 'historiographic consequences' of this world-view. Of course, the historiographic practice to be illuminated must always be viewed and interpreted against the above outlined backdrop of the weltanschauung of which it is a part.

HISTORIOGRAPHIC CONSEQUENCES

To avoid confusion, two points warrant our initial attention: first, there is a clearly developed historiographic methodology which is fully within our first mode of inquiry. Second, this methodology was not developed by practicing historians, is only partially accepted by practicing historians, and has had limited effect upon the discipline of history.

To account for this is to gain insight into the need for our undertaking in the first place. One major reason why history is at a preparadigmatic stage is because historians so infrequently venture into analyses of the logic of their discipline. Indeed, few eminent historians (with the notable and welcome exceptions we will have occasion to refer to) even recognize the need for an examination of the theoretical and methodological underpinnings of their work. We believe that Bernard Bailyn speaks for the majority of the historical community when he denigrates precisely the sorts of issues addressed herein:

> Problems of objectivity and subjectivity, the involvement or detachment of the inquiring mind, the nature of facts, and the predictive value of historical knowledge are obviously exciting and fruitful subjects for anyone, philosopher or historian, to consider. But they fall more naturally and immediately into the provinces of thought of the working philosopher, of a certain type of interest, than of the working historian. Let me put it more bluntly and personally. Like many historians, I have had a good deal of interest in these questions; and I have pursued them as far as time and ability have allowed me to. But insofar as my concern has been with understanding, teaching, and writing about what has happened in the past, I have never once felt it necessary to work

> out precise answers to such questions -- questions of objectivity and subjectivity, the nature of fact, etc. -- in order to advance my work in history.[97]

Bailyn's viewpoint is significant because an attitude of "the study of history is different from the study of the premises of historical thought no matter how intimately the two are related"[98] virtually ensures that historiography will continue to remain at pre-paradigmatic levels of development. If they do not recognize the roots of their methodological differences, historians will continue to have great difficulty breaking down the sometimes hostile barriers between schools of historical thought. The result is that history itself is in a 'crises' situation: the legitimacy and utility of the discipline is in question; indeed even the status of history as a discipline is questioned.

The tragedy of this becomes even greater if we recognize that history occupies such a crucial position in recent methodological debates -- debates which engulf all disciplines. This is perhaps a consequence of the nature of historical inquiry. As Jarrett notes, history may be classified or conceived as a discipline which lies somewhere between two differing [we would say fundamentally competing and often antagonistic] orientations toward knowledge. Consequently, it serves as an ideal battleground for methodological debates. Also, like philosophy, history serves a "synoptic function" in that the historian necessarily touches upon many disciplinary areas in his work.[99] Thus the logic of historical inquiry has attracted the attention of many methodologists, but the practicioners of history are all too often content to stay aloof from the fray.

Clashes between competing methodologists, representing competing modes of inquiry, have mainly been carried by philosophers of science who are particularly interested in the philosophy of history. Indeed, mode 1 adherents have been especially active here. The aforementioned result is a clearly developed historiographic methodology which is fully within our first mode of inquiry.

(i) Object of Historical Study

J.B. Bury's dictum "history is a science, no less and no more"[100] capsulizes mode 1's historiographic perspective. This does not imply that there are no peculiar problems in practicing 'scientific' history, and mode 1 adherents certainly do recognize this. But the model for model historiography exists and meets all the rigorous epistemological demands of mode 1. We begin with an ontological consideration: the object of study, the subject of inquiry.

The ontological tenets of mode 1 applied here necessitate that only empirical entities can be objects of study. The subject of history, like the subject of all inquiry, must be wholly 'phenomenal' objects -- we may only study 'facts.' This is the empirical definition of 'facts.' Historians, however, do claim to be dealing with facts. As G.N. Clark reminds us:

> . . . we must not forget that there are such things as facts. . . . All of our knowledge of the past has a hard core of facts, however much it may be concealed by the surrounding pulp of disreputable interpretation.[101]

That 'surrounding pulp,' as we shall see, presents severe problems for designing an 'objective' historiographic methodology. Facts, none-the-less, do exist. However, just as mode 1 depopulates the cosmos of all 'metaphysical' entities, so is the armoury of 'historical facts' purged of all such entities. The result of this is a great reduction in the number of statements which qualify for consideration as historical facts. This is effected through adoption of the perspective of 'methodological individualism.'[102]

This orientation, as it is applied to history, finds perhaps its most eloquent and methodologically significant articulation in F.A. Hayek. His critique of the 'objects' historians study may be abridged as follows. In commenting on the "wholes which the historian studies" Hayek insists:

> They are never given to him as wholes, but always reconstructed from their elements which alone can be directly perceived. Whether he speaks about the government that existed or the trade that was carried on, the army that moved, or the knowledge that was preserved or disseminated, he is never referring to a constant collection of physical attributes that can be directly observed, but always to a system of relationships between some of the observed elements which can merely be inferred. Words like government or trade or army or knowledge do not stand for single observable things but for structures of relationships which can be described only in terms of a schematic representation or 'theory' of the persistent system of relationships between the everchanging elements. These 'wholes,' in other words, do

> not exist for us apart from the theory by which we constitute them, apart from the mental technique by which we can reconstruct the connections between the observed elements and follow up the implications of this particular combination.[103]

This is not to deny that the above 'wholes' contain "observed elements" which are "natural units" which can be "directly comprehended."[104] These indeed constitute the "hard core of facts" Clark directs our attention toward. However, any attempt to 'see' more than the (empirical) entities and events we can confidently say existed -- a man, the act of signing a document, an earthquake, a city, a meeting of persons, etc. -- is to run the great risk of granting ontological status to metaphysical entities. To write the history of 'wars' or the history of 'democracy' or the history of 'ideas' is to imply that these are empirical entities with material, concrete, existence. Mode 1 cannot admit such propositions because these terms defy attempts at fully "phenomenal formulation."[105]

But we must consider that this does not mean an end to historical entities; only an end to the historical entities historians commonly work with. All mode 1 demands is that we stop treating concepts such as 'civilization,' 'nationalism,' 'government,' etc. as empirical entities. These are theoretical concepts which identify relationships between empirical entities. Just as a law of physics is a "shorthand description of observable events,"[106] so must we recognize, for example, 'war' to to be a mere convenient schematization for concrete, empirical, events (specific movements of men, production of particular materials, the issuing of specifically worded speeches and documents, etc.). 'War' is not the events themselves and has no more empirical existence than Boyle's Law. The validity of concepts such as 'democracy' exists only in reference to the concrete events being referred to. To speak of democracy as having a separate ontological existence is to speak in the abstract. It is to say the equivalent of "Boyle's Law exists independently of the context of specific pressure and specific volume and specific temperature (all within a specific maximum and minimum measurable range) of specified gases." This is not to say, however, that such theoretical assertions as 'democracy' cannot be as 'true' as Boyle's Law. To this crucial point we shall return momentarily.

(ii) Method of Study

(a) Objectivity

Having defined the object of study, we now return to the 'surrounding pulp' which 'conceals' our 'hard core of facts.'[107] 'Objectivity,' as we have seen in our discussion on the epistemological perspective of mode 1, concerns itself with attaining the ideal of 'direct observation' of an 'empirical reality.' At first glance, Christopher Blake's observation that "in the Correspondence view, the only kind of verification is by direct confrontation, and with history this is out of the question"[108] appears to make the ideal of objective history unattainable. To avoid such an apparent impasse, we must return to Popper's ontological 'triviality.'[109]

Mode 1 rests upon the premise that an empirical reality exists, and it is our epistemological task to recognize that reality. In physical science the recourse to more direct observation is obvious: truth is correspondence with the facts, and we can ascertain the truth of assertions "by examining or testing the assertion itself." Crucially, Popper notes, "in connection with this examination, all kinds of arguments may be relevant. A typical procedure is to examine whether our theories are consistent with our observations. But we may also examine, for example, whether our historical sources are mutually and internally consistent."[110]

This 'we may also' qualification is important as it reminds us that we are dealing with an epistemological approach. We are reminded that empiricism is principally a "statement concerning the ways and means of acquiring knowledge of the world,"[111] the core of which is the attempt to correlate our assumptions with independent, material, events. This is an elusive quest, and success often requires ingenuity. If we cannot achieve the most desirable method of so verifying our assumptions (direct observation of facts) we must use other avenues in seeking to attain the same end. Thus the admonition to 'check our facts' is the principle rule, and historians are free to do this in the most competent and conscientious manner possible. And, indeed, they do. After all:

> Let it be noted first that among the working canons of historians are standards for determining the accuracy or reliability of sources -- standards

> which are commonly applied. . . . it is indisputable that standards of intellectual honesty are in practice observed. . . . In short, there is at least a part, actually a very considerable part, of history which is acceptable to the community of professional historians beyond all question by these standards.[112]

It is the rigor of these standards that determines the objectivity of history. The hope for objectivity is justified because "clearly no historian will accept the evidence of documents uncritically. There are problems of genuineness, there are problems of bias, and there are also such problems as the reconstruction of earlier sources."[113] However, "the proper epistemological question is not about sources; rather, we ask whether the assertion is true -- that is to say, whether it agrees with the facts."[114]

A consequence of this is the necessity for a much more limited and modest role for the discipline of history. As Mandelbaum cautions, "where materials are lacking statements should not be made, or if statements are made the grounds of judgment should be given."[115] Precisely because of the 'problems' mentioned by Popper, historians should be very careful indeed. Above all, what may be called the 'scope' of study must be greatly reduced to achieve the ideal of objectivity. In the words of David Fischer:

> . . . it is correct to argue that no historian can hope to know the totality of history as it actually happened. But it is wrong to conclude that objective historical knowledge is therefore impossible.[116]

Such ('objective') history is possible if we accept what Mandelbaum calls a "modified encyclopedism." If we restrict ourselves to only such histories where there are enough "materials" to confidently warrant making 'true' [in correspondence with these 'materials,' these 'facts'] statements, then historians can "cooperatively" develop a

> body of independent narratives dealing with different aspects of the human past at different times and places, and dealing with these in both the large and in the small, with all of these accounts not only not contradicting one another, but actually reinforcing each other. As is clear, this is one form of encyclopedism, and it can of course also be characterized as an unmitigated objectivism.[117]

Mode 1's critique of practicing historians is that such an 'encyclopedism' is often scoffed at. Thus Fischer castigates historians because the "fundamental skill of factual verification has not been sufficiently attended to. The incidence of simple factual error in academic history today is nothing short of appalling."[118] Historians ignore this reality; they refuse to recognize that they have very few 'truth statements' to rely upon. Remembering, "what we do mean when we say that a statement is true because it corresponds with the facts is that the statement expresses a relation between its terms which holds between the real objects symbolized by those terms,"[119] one conclusion seems obvious. Until we clearly identify empirical facts historians cannot hope to have meaningful assertions equivalent to, say, Boyle's Law.

This takes us back to the discussion left off just as we entered into examination of mode 1's 'method of study.' While, for example, Boyle's law and 'democracy' are both theoretical statements, the former is a 'true' theoretical statement. It is a very specifically delineated statement of relations which hold between clearly isolated empirical entities. No such precision is inherent in the term 'democracy.' The term is so broad, so vague and so elusive, that a fully 'phenomenal formulation' is impossible. Yet historians continue to employ such terms and to treat such vague, general, concepts as the very subject matter of their discipline. Thus Albert Hofstader can assert

> The primary subject of history is not the individual historical being -- the human individual -- but the superindividual group, with its associations, institutions, and practices. . . . group life is more than the sum of individual lives and . . . there is a determinate sense in which it can be sensibly said, for example, that a group has attempted the planning and execution of a certain project -- e.g. the construction of a canal across a given isthmus -- and has failed or succeeded.[120]

Thus entities such as 'nations,' 'creeds,' 'empires,' etc. assume concrete ontological status. Worse still, as is implicit in Hofstader's above statement, historians do not restrict the use of such terms to a descriptive function. Boyle's law is meant to describe; it does not 'exist' as an ontological reality independent of the empirical entities it describes. 'Nations,' 'institutions,' etc. however are not only not recognized for what they are (extremely vague descriptions), are not only actually reified and treated as independent, empirical, entities, but actually assume a life and a will of their own. Thus Hofstader is readily able to continue with statements such as "groups -- family, tribe, nation, people, humankind -- develop their own purposes," and "the fundamental object of the historian's concern . . . is the career of the concrete group, whose life course is the whole within which the life-courses of individuals and their associations occur" and "like the individual, the concrete group has to make an adjustment between itself and its world."[121]

It is in so reifying concepts into "concrete groups" that historians employ metaphysical entities, and it is toward the elimination of such epistemological and methodological error in the discipline of history that mode 1 addresses itself.

Finally, we must note that the question 'can history ever become as exact a discipline as the natural sciences?' is spurious. In all likelihood it cannot, but that does not mean it cannot meet all of the demands of "rational inquiry," thereby fully meeting all criteria of the "one method of philosophy"[122] which is the essence of the mode 1 perspective. At any rate, objectivity is but the rigorous quest for truth. All of our true assertions are, in Popper's term, "conjectures"; all are open to criticism and all must be constantly checked, in every conceivable way, against newly discovered facts, against the whole repository of long established facts, and against other 'conjectures.' And, of course, the 'facts' themselves must be open to re-verification lest we somehow make an error in our empirical data. In other words in history, as well as in all disciplines, every 'assertion' must be fully open to "critical discussion of its validity."[123] To engage in discussion of an hierarchy of disciplines on the criteria of 'objectivity' is to fragment mode 1 into a less than comprehensive world view. All disciplines are to meet mode 1's epistemological criteria; the methodology of all disciplines can be adapted to the model of inquiry.

Conviction that history can indeed meet these criteria has been one basis for the great interest in this discipline that mode 1 philosophers of science and history have shown. Certainly acceptance of their perspective necessitates a very much more modest role, the 'encyclopedic' role envisioned by Mandelbaum and Popper, for the discipline and its practicioners. And it will also require dedicated effort from practicing historians for:

> It is no easy matter to tell the truth, pure and simple, about past events; for historical truths are never pure, and rarely simple. And the process of historical truth-telling itself is even more intricate than the truths which historians tell. Every true statement must be thrice true. It must be true to its evidence, true to itself, and true to other historical truths with which it is coligated. Moreover, a historian must not merely tell truths, but demonstrate their truthfulness as well. He is judged not simply by his veracity, but by his skill at verification.[124]

But if historical statements do become so 'thrice true,' and if zeal for ever more refined verification procedures never subsides, then a discipline of history fully compatible with the model of mode 1 is completely possible.

(b) Explanation

As Mandelbaum notes, there is a

> direction of inquiry in an explanatory account. Generally speaking, inquiry starts from a given outcome and proceeds in a direction that is the reverse of the direction in which the events responsible for that outcome actually occurred;

> in other words, an explanatory account involves a tracing back of events from the present toward the past.[125]

Such a 'tracing back' is an attempt to correlate one specific event (i.e. Hempel's "explanandum") with other, preceeding, events ("antecedent conditions"). The most critical aspect in such a correlation is showing that the event we have isolated "came about in accordance with certain general laws or theoretical principles . . . in the sense that its occurrence can be inferred from those laws taken in conjunction with a set of [antecedent conditions]."[126] Thus explanation involves establishment of what Hempel, as we previously noted, called "logical conditions of adequacy" and the above 'general laws' explain an event through "showing that the event in question was not 'a matter of chance,' but was to be expected . . . The expectation referred to is . . . rational scientific anticipation which rests on the assumption of general laws."[127]

The establishment of such 'expectation' is the task of general laws. Without general laws, all events would seem wholly unique in the sense of being unrelated to other events. Therefore everything would appear a 'matter of chance,' resulting in our inability to understand [in the sense of "rational scientific anticipation"] the phenomena of our world. Thus laws link events in the form of offering causal explanations, and it is a fruitful analogy to say "causal relationships are the glue of historical narrative."[128] General laws in history are the 'glue' which allows us to 'understand' historical events just as general laws in the natural sciences allow us to understand physical events. The events in both instances are comprehensible because they are related within an overall pattern of general laws. In this sense, Hempel is correct in saying that "general laws have quite analagous functions in history and in the natural sciences" and "both [history and natural science] can give an account of their subject-matter only in terms of general concepts."[129]

However -- granting that such a function is performed by general laws in the physical sciences -- we must still establish that it is possible to apply general laws in history. Two considerations demand this. First, it can be insisted [conceding that we can ascertain wholly objective historical events and wholly objective antecedent conditions as discussed in the previous subsection] that historical events are wholly unique. If historical events are so wholly unique, then we cannot formulate general laws to explain them. At best, we may describe a unique set of circumstances involving the interaction of unique entities. Neither the entities nor the pattern of interaction, however, is indicative of any general laws as this is an isolated ('unique') incident.

This perspective, however, rests upon a logical fallacy, and Berkhofer neatly disposes of it:

> Just as the historian cannot talk about the unique and nonrepetitive without resort to the general and the recurrent, so he cannot know something or some moment is unique unless he consciously and conscientiously does the comparison to prove it singular.[130]

Thus:

> If an analyst can isolate the differences among some phenomena or movements to individualize them, then he must also have noted their similarities for the purposes of comparison.[131]

To admit Berkhofer's argument is to recognize, with Mandelbaum, that "no historical event could be described, much less could it be in any sense explained, if it were wholly unique."[132] In so disposing of the above as a pseudo-problem, mode 1 must now address itself to the more troublesome suggestion that the 'form' of explanation in history is fundamentally different from scientific explanation. That is, historical explanations must center upon, or at least take into account, the 'motives,' 'reasons,' 'intentions,' etc. of the historical actor. This consideration is most articulately raised by Dray in his classic Laws and Explanation in History.[133]

Dray's criticism that purposeful action -- action where the historical actor makes a 'choice' and has 'reasons' for his choices -- cannot fall under the umbrella of covering law explanations is not, however, convincing. As Raziel Abelson stresses, "in arguing that a historian's job is to find reasons rather than compelling causes, Dray nevertheless concedes to determinists that reasons may be a special subclass of causes (presumably 'psychic' causes)."[134] This is Hempel's precise point, and he cautions that in offering explanation by giving the 'reasons' behind actions we in fact rely upon many 'implicit assumptions.' We may for example assume that the historical actor was rational, knew of the options open to him, perhaps had faced similar circumstances before, etc. Failure to make such assumptions explicit "obscures the logic of the explanatory argument."[135] Making all such assumptions fully explicit allows a formulation of actions fully within the covering law model.

For example, the explanation for 'A did X' is not properly formulated:

> Agent A was in a situation of kind C.
> When in a situation of kind C, the thing to do is X.
>
> Therefore, agent A did X.
>
> The first statement in the explanans specifies certain antecedent conditions; the second is a principle of action taking the place which, in a covering law explanation, is held by a set of general laws.
>
> . . . But while the explanans just formulated affords good grounds for asserting that the appropriate thing for A to do under the circumstances was X, it does not provide good reasons for asserting or believing that D did in fact do X. To justify this latter assumption, the explanans would have to include a further assumption . . .
>
> Agent A was in a situation of kind C.
> A was a rational agent at the time.
> Any rational agent, when in a situation of kind C, will
> invariably (or: with high probability) do X.
>
> and it will then logically imply (or confer a high inductive probability on) the explanandum
>
> A did X.
>
> Thus modified, the account will indeed provide an explanation of why A did in fact do X. But its adequacy for this purpose has been achieved by replacing Dray's evaluative principle of action by a descriptive principle stating what rational agents will do in situations of kind C. The result is a covering law explanation, which will be deductive or inductive according as the general statement about the behavior of rational agents is of strictly universal or of probabilistic-statistical form.[136]

So formulated, the claim is that we can in every case replace an "evaluative principle of action by a descriptive principle." It matters not whether we have rational agents or irrational agents. The insights of psychology are as capable of yielding laws of rational thought as are the insights of abnormal psychology capable of yielding laws of irrational thought. That these laws are not absolute, merely 'probabilistic,' is not crucial. In the end, "the difference between the historian's sketch and an ideal 'scientific' explanation is in the former's lack of precision, not in its logical form."[137] This emphasis upon logical form coupled with our previous analysis revealing the existence of truly 'objective' (empirical) historical facts serves to reinforce the underlying unity of method which mode 1, as a general world view, adheres to. As Mandelbaum, in commenting on Hempel, recognizes:

> . . . the essential point which [Hempel] wished to establish was that general laws have a necessary explanatory function in historical inquiry, and that historical explanation does not therefore utilize a different type of explanation from that which is to be found in the natural sciences.[138]

The crux of the matter lies in equating 'explanation' with the formulation of 'laws.' In mode 1, "to find explanations and to discover laws is one and the same thing."[139] Only by seeking such laws can history begin to slowly expand its aforementioned limited compilation of "chronicles"[140] and seek a wider scope. A chronicle is a mere "conjunction of statements. The truth of the chronicle is a function of the truth of its components alone." However, "a history employs the notion of explanation" and "we may conceive of a history as a logical conjunction of explanatory assertions." These explanatory assertions link statements of fact and if these factual statements are true, the history itself will be true if its "component explanatory or 'because' statements are true."[141]

Thus conceived, historical explanation differs not from any other explanation. The result is that the discipline of history can make meaningful contributions toward the attainment of mode 1's ultimate goal -- the establishment of itself as a pervasive weltanschauung in which all disciplines are part of the "one method of philosophy" and all contribute to the activity of "rational inquiry."[142] Thus 'historical knowledge' takes its place alongside all genuine knowledge:

> When historians explain, they claim to provide knowledge. Explanation in history, therefore, must fulfill the same requirements as explanations in other areas, . . . More generally, historical explanation must meet the criteria which any claim to knowledge must meet, regardless of its context.[143]

(iii) Uses of History

We now, in conclusion, turn from explication of the nature of knowledge in the perspective of mode 1 to consideration of the ultimate significance and use of such knowledge. We begin by asking: what can we learn from history?

(a) Educational Uses

First, there is nothing in mode 1 which allows us to draw any form of what can be termed a 'lesson' from our historical data or our compiled historical words. This is, emphatically, not to say that we cannot learn 'truths' about the past. As has been illustrated, we can obtain much accurate historical knowledge. Such knowledge, however, is normatively 'neutral' information. That is, it offers no prescription on how we should 'judge' the past; it offers no basis upon which we should make 'value judgements.'

It is in this sense that "history has no meaning" -- because "facts as such have no meaning."[144] We have recognized 'Russell's dilemma'[145] and we have noted mode 1's disdain for 'metaphysics.'[146] Both logically preclude any possibility of discovering normative 'truths' in any 'objective' histories we succeed in compiling. However, this does not mean that we cannot deliberately and consciously choose to assign a normative element to historical facts; nor does this mean (as we shall see momentarily) that history has no utilitarian value. As Popper notes, "although history has no meaning, we can give it a meaning."[147] This is because:

> It is the problem of nature and convention which we meet here again. Neither nature nor history can tell us what to do. Facts, whether those of nature or those of history, cannot make the decision for us, they cannot determine the ends we are going to choose. It is we who introduce purpose and meaning into nature and into history.[148]

So infusing our histories with 'values' is acceptable if we clearly recognize that any 'meaning' we find in history -- i.e. "it is 'desirable' that Chadwick's activities contributed toward an effective General Board of Health in mid 19th century England"; "the uprisings of 1789 'liberated' many men from some forms of overt authority," etc. -- is wholly imposed by us and is an ethical judgment which falls outside of any defensible 'truth' statement. Like Russell's "good life" -- and the above notions of 'desirable' and 'liberating' -- the normative significance of objective historical reality is a consideration mode 1 cannot and will not address itself to.

(b) Pragmatic/Instrumental Uses

However, as we have seen, history can describe past reality and that knowledge does have concrete utility. Most importantly, mode 1 considers prediction to be a central trait of reliable knowledge. In mode 1, "prediction and scientific explanation are but the two sides of one coin. One who can always predict knows all the laws, and conversely."[149] Because it is directly related to the functioning of general laws, the centrality of the notion of prediction cannot be overemphasized. Laws, explanation and prediction are so intertwined that Hempel can lump all three for treatment as but one aspect of the two major aims of empiricism:

> Empirical science has two major objectives: to describe particular phenomena in the world of our experience and to establish general principles by means of which they can be explained and predicted.[150]

Prediction and retrodiction are identical processes because of their reliance upon laws, and to use general laws is to offer an explanation. It is only against what Hempel calls the "patterns" laws provide that individual events become intelligible. As noted, without general laws all events would appear to be wholly unrelated to other events, and all occurrences would appear to be a "matter of chance."[151] Thus "the main function of general laws . . . is to connect events in patterns which are usually referred to as explanation and prediction."[152] These 'patterns' of laws provide what may be called a general field of meaning within which a specific meaning ['understanding' an event in question] can emerge. ('Meaning' is here, of course, not employed in a normative sense. It is rather to be understood in a cognitive sense.) As a result of the reliance upon laws, "the logical structure of explanation is equivalent to that of prediction and verification, one logical model serving to elucidate what we mean by all three."[153]

This ability to go beyond 'explaining' in the sense of accounting for events to actually predicting specific events is the most significant pragmatic and instrumental aspect of mode 1's orientation. It offers the hope of 'knowing' not only why something (some event) happened, but also allows us to peek into the future with some certainty to see what will happen. This is the logical extension of Nagel's 'principle of determinacy,' which is a tenet of scientism. Determinism is

> in effect a regulative principle which formulates the general objective of science as a search for explanations -- as a quest for ascertaining the conditions upon which the occurrence of events is contingent. . . . to abandon the deterministic principle itself, is to withdraw from the enterprise of science.[154]

From the above, it appears that history should be able to 'absolutely' predict both future events, and as yet uninvestigated past events. This is, however, rarely if ever the case. Two factors account for the historian's inability to do this. First, we recall that the general laws historians work with are, in Hempel's terms, "probabilistic." In like vein, we must heed Mandelbaum's cautioning that historians' "generalizations" are "loose in formulation" because the "general 'knowledge of human nature' involved in historical explanations does not consist in clearly formuable laws comparable to laws formulated in any [physical] science."[155] Therefore the laws that historians have at their disposal offer at best varying degrees of statistical reliability, and certainly there are no macro-laws in history of the scope of, for example, the law of gravitation. This latter fact is quite significant in that it raises the question of whether history can ever attain the highest levels of explanation effected by the most general theoretical formulations of the physical sciences. As Paul Conkin observes:

> It is a fact that historians cannot avail themselves of a generally accepted model of human nature that encompasses culture or final causes. This precludes the highest generality, or the elevating of particular causes to the level of a universal class.[156]

The second factor inhibiting the possibility of absolute or certain prediction has to do with the nature of the empirical historical entity. In history, as in all social science, it is extremely difficult to isolate precisely identical "antecedent conditions." Thus the sets of circumstances to which [the already much less than absolute] historical laws are to be applied provide a further complication because, although the entities involved in differing situations may be very similar, they are perhaps never 'identical' in the same way that, for example, the entities entering into hydrogen combustion are. The above factors make the application of the knowledge gained from history [knowledge of objective historical entities and events, and the laws which explain the specific actions of such entities and the occurrence of such events] very problematic. That is, we must be extremely careful in our use of such knowledge in any attempts to predict events or to have such knowledge serve as a reliable guide to social action.

Considerations such as those noted above prompt Popper to advocate only the very most cautious instrumental applications of not only historical data and laws but all the laws and data of social science to the area of social life and action. We must, says he, not venture beyond "piecemeal engineering."

> The piecemeal engineer knows, like Socrates, how little he knows. He knows that we can learn only from our mistakes. Accordingly, he will make his way, step by step, carefully comparing the results expected with the results achieved, and always on the look-out for the unavoidable unwanted consequences of any reform; and he will avoid undertaking reforms of a complexity and scope which make it impossible for him to disentangle causes and effects, and to know what he is really doing.[157]

Historians must not, however, be too quick to dismay. These very same limitations exist in all disciplines -- including the natural sciences. The whole point of such caution is to ensure we do not over-estimate the degree to which our laws and our data are reliable. We must, as Popper stresses, be careful not to make logically unwarranted extrapolations from our data and laws:

> The crucial point is this: although we may assume that any actual succession of phenomena proceeds according to the laws of nature, it is important to realize that practically no sequence of, say, three or more causally connected concrete events proceeds according to any single law of nature. If the wind shakes a tree and Newton's apple falls to the ground, nobody will deny that these events can be described in terms of causal laws. But there is no single law, such as that of gravity, nor even a single definite set of laws, to describe the actual or concrete succession of causally connected events; apart from gravity, we should have to consider the laws explaining wind pressure; the jerking movements of the branch; the tension in the apple's stalk; the bruise suffered by the apple on impact; all of the bruise, etc. The idea that any concrete sequence or succession of events (apart from such examples as the movement of a pendulum or a solar system) can be described or explained by any one law, or by any one definite set of laws, is simply mistaken. There are neither laws of succession, nor laws of evolution.[158]

As in science, so in history. We can only find 'general laws' (overwhelmingly of a statistical kind) for very limited periods. Thus the general laws in history describe merely short-term "trends":

> Explained trends do exist, but their persistence depends on the persistence of certain specific initial conditions (which in turn may sometimes be trends) . . . [We must not] overlook the dependence of trends on initial conditions [and] operate with trends as if they were unconditional, . . .[159]

In short, there is no recourse to laws of historical development that apply to all of history, but we can study the 'trends' of specific periods and places. This is the meaning of Berkhofer's assertion: "Thus, we can study processes in history but not history as process."[160] However, the form of explanation is the same in history and in science, and the method of history is the same as the method of all study.

In conclusion, we can see that history, as a discipline, must play if not a decidedly limited then at the very least an extremely cautious role in the realm of social praxis. The 'uses of history' -- both in terms of what can be learned from history and how such knowledge can be applied -- are subject to the same constraints as are the 'uses' of any discipline modeled upon "rational inquiry." We now leave the mode 1 world view to examine what is in fact its antithetical weltanschauung.

Footnotes - Chapter II

[1] Frederick Suppe, ed., *The Structure of Scientific Theories* (2nd. ed.; Illinois: Board of Trustees of the University of Illinois, 1977). We must stress that herein we are not limiting the scope of the category 'received view' to merely its application to theories -- as is Suppe's main thrust. Rather, we are interested in the received view as "a general doctrine of *cognitive significance*" (p. 13; italics in original).

[2] Ibid., p. 618.

[3] A.J. Ayer, ed., *Logical Positivism*, a vol. in *The Library of Philosophical Movements*, general editor Paul Edwards (Glencoe: The Free Press, 1959), pp. 3-9 offers a very concise and readable account of the history of logical positivism. For other excellent introductions to the history of this movement see Joergen Joergensen "The Development of Logical Empiricism," Vol. II of *Foundations of the Unity of Science: Toward an International Encyclopedia of Unified Science*, ed. by Otto Neurath, Rudolf Carnap and Charles Morris (Chicago: The University of Chicago Press, 1970); Gustav Bergmann, *The Metaphysics of Logical Positivism* (N.Y.: Longman's Green and Co., 1954), pp. 1-16; Victor Kraft, *The Vienna Circle: The Origin of Neo-Positivism, A Chapter in the History of Recent Philosophy*, translated by Arthur Pap (N.Y.: Philosophical Library, 1953), pp. 3-11; J.O. Urmson, *Philosophical Analysis: Its Development Between the Two World Wars* (London: Oxford University Press, 1967).

[4] Ayer, *Logical Positivism*, p. 4. Other developments of the intellectual antecedents of Mode 1 include George Novack, *Empiricism and Its Evolution: A Marxist View* (N.Y.: Pathfinder Press, 1971); George Novack, *The Origins of Materialism* (N.Y.: Pathfinder Press, 1965).

[5] Bergmann, *The Metaphysics of Logical Positivism*, p. 1.

[6] Joergen Joergensen, "The Development of Logical Empiricism," p. 847.

[7] Gerard Radnitzky, *Contemporary Schools of Metascience* (3rd., enlarged, ed., three volumes in one; Chicago: Henry Regnery Company, 1973), p. xv. Italics in original.

[8] Bergmann, *The Metaphysics of Logical Positivism*, p. 2. Bergmann, however, is limiting this comment to his analysis of the logical positivist movement.

[9] Novack, *The Origins of Materialism*, p. 4.

[10] As cited in Ayer, Logical Positivism, p. 27.

[11] Karl R. Popper, Objective Knowledge: An Evolutionary Approach (London: Oxford University Press, 1972), pp. 32-33. Italics in original. Popper's views on ontology are particularly instructive as he clearly recognizes the paradox of Mode 1: The inevitability of having to make at least one axiomatic proposition -- in spite of distaste for a priori statements. Thus he cautions:

> . . . realism is neither demonstrable nor refutable. Realism like anything else outside logic and finite arithmetic is not demonstrable; but while empirical scientific theories are refutable, realism is not even refutable. (It shares this irrefutability with many philosophical or 'metaphysical' theories, in particular also with idealism.) But it is arguable, and the weight of the arguments is overwhelmingly in its favor. (p. 38)

In the final analysis, he is fully aware that

> . . . even realism and its (biological) theory of knowledge are two conjectures; and we argue that the first is a much better conjecture than idealism. (p. 105)

[12] These phrases are borrowed, in turn, from Ayer and Bergmann: Ayer, ed., Logical Positivism, p. 10; Bergmann, The Metaphysics of Logical Positivism, p. 68.

[13] Novack, Empiricism and Its Evolution, pp. 19-20. Italics in original.

[14] Popper, Objective Knowledge, p. 73. Italics in original.

[15] Ibid., p. 108. Italics in original.

[16] Suppe, ed., The Structure of Scientific Theories, p. 13. Italics in original.

[17] Carl G. Hempel, "The Empiricist Criterion of Meaning" in Logical Positivism, ed. by A.J. Ayer, p. 108. Italics in original.

[18] J.R. Weinberg, An Examination of Logical Positivism, a vol. in The International Library of Psychology, Philosophy and Scientific Method, edited by C.K. Ogden (Paterson, N.J.: Littlefield, Adams & Co., 1960), p. 2.

[19] Ayer, ed., Logical Positivism, p. 13.

[20] Popper, Objective Knowledge, p. 44.

[21] Ibid., p. 73.

[22] See: Carl G. Hempel and Paul Oppenheim, "Studies in the Logic of Explanation," *Philosophy of Science*, Vol. XV, No. 2 (April, 1948); Carl G. Hempel, "Explanation and Prediction by Covering Laws" in *Philosophy of Science: The Delaware Seminar*, Vol. 1, 1961-62, ed. by B. Baurin, a vol. in *Philosophy of Science*, general editor William L. Reese (N.Y.: Interscience Publications, 1963); Carl G. Hempel, *Philosophy of Natural Science*, a vol. in the *Foundations of Philosophy Series*, ed. by Elizabeth and Monroe Beardsley (Englewood Cliffs, N.J.: Prentice-Hall Inc., 1966); Carl G. Hempel, "Explanation in Science and in History" in *Philosophical Analysis and History*, ed. by William H. Dray, a vol. in *Sources in Contemporary Philosophy*, consulting ed. Frank A. Tillman (N.Y.: Harper and Row, 1966); Carl G. Hempel, "Formulation and Formalization of Scientific Theories: A Summary-Abstract" in Suppe, ed., *The Structure of Scientific Theories*.

[23] Hempel and Oppenheim, "Studies in the Logic of Explanation," p. 137.

[24] See Alan Donagan, "The Popper-Hempel Theory Reconsidered" in Dray, ed., *Philosophical Analysis and History*, for not only a discussion of the contributions of both Popper and Hempel, but also a very lucid description of the theory as well as a balanced critique.

[25] Hempel, *Philosophy of Natural Science*, p. 1.

[26] See, for example, Carl G. Hempel, "On the Nature of Mathematical Truth" in *Readings in the Philosophy of Science*, ed. by Herbert Feigl and May Brodbeck (N.Y.: Appleton-Century-Crofts, Inc., 1953).

[27] Hempel, "Explanation and Prediction by Covering Laws," p. 116.

[28] Hempel and Oppenheim, "Studies in the Logic of Explanation," p. 135.

[29] Ibid., pp. 136-137.

[30] Ibid., p. 137.

[31] Hempel, "Explanation in Science and in History," p. 96.

[32] William H. Dray, *Laws and Explanation in History* (3rd. impression; London: Oxford University Press, 1964), p. 1.

[33] Hempel, "Explanation in Science and in History," pp. 100-102.

[34] Ibid., p. 97.

[35] Ibid., p. 97.

[36] Ibid., p. 101.

[37] Ibid., p. 102.

[38] Ibid., pp. 103-107. The "elliptically formulated" explanation (deductive or probabilistic) takes for granted common knowledge of the laws and descriptive facts contained in the explanans, and therefore does not enumerate them. However, one may make these explicit at will, thereby puting the explanation into the true and whole form of either the deductive or inductive-nomological model. A "partial explanation" is more problematic.

Here, "any particular event may be regarded as having infinitely many different aspects or characteristics, which cannot all be accounted for by a finite set, however large, of explanatory statements." (p. 107) Thus the explanans cannot be completed as the explanandum is too complex (i.e. difficult to describe because it has so many characteristics). Hempel, however, clearly feels that this is a problem which can be solved. This is a true nomological model, but it is in "outline" form only. It "may suggest, perhaps quite vividly and persuasively, the general outlines of what, it is hoped, can eventually be supplemented so as to yield a more closely reasoned argument." (p. 107)

[39] David Hume, An Inquiry Concerning Human Understanding, Section VII, Part II, "Of the Idea of Necessary Connexion" in Essential Works of David Hume, edited by Ralph Cohen (Bantam Matrix edition; N.Y.: Bantam Books, 1965), p. 98. Italics in original.

[40] Hempel, "Explanation and Prediction by Covering Laws," p. 115. Our emphasis.

[41] Ibid., pp. 107-108.

[42] Karl R. Popper, The Logic of Scientific Discovery (2nd, Harper Torchbook, edition; London: Harper & Row, 1968), pp. 60-61.

[43] Ibid., pp. 15-16. Italics in original.

[44] Hempel and Oppenheim, "Studies in the Logic of Explanation," pp. 135. Italics in original.

[45] Suppe, ed., The Structure of Scientific Theories, p. 14.

[46] B.F. Skinner, Beyond Freedom and Dignity (Bantam/Vintage edition; N.Y.: Bantam Books, 1972).

[47] Bergmann, The Metaphysics of Logical Positivism, p. 19.

[48] Skinner, Beyond Freedom and Dignity, p. 16.

[49] B.F. Skinner, About Behaviorism (Vintage Books edition; N.Y.: Random House, 1976), pp. 202-203.

[50] John Gunnell, Philosophy, Science, and Political Inquiry (Morristown, N.J.: General Learning Press, 1975), p. 231. Here Gunnell is citing John G. Kemeny, "A Philosopher Looks at Political Science," The Journal of Conflict Resolution, 4 (Sept., 1960), p. 292.

[51] Here we are citing Popper. See footnote 20.

[52] D.H. Monroe, Empiricism and Ethics (London: Cambridge University Press, 1967), p. 11.

[53] Gustav Bergmann, "Ideology" in Readings in the Philosophy of the Social Sciences, edited by May Brodbeck (N.Y.: Macmillan Publishing Co., Inc., 1968), p. 125.

[54] See footnote 18.

[55] Gunnell, Philosophy, Science, and Political Inquiry, pp. 249-250. Italics in original. Here Gunnell is quoting Heinz Eulau, "Tradition and Innovation: On the Tension Between Ancient and Modern ways in the Study of Politics" in Behavioralism in Political Science edited by Heinz Eulau (N.Y.: Atherton Press, 1969), p. 11.

[56] Paul W. Taylor, "Social Science and Ethical Relativism" in Ethical Relativism, edited by John Ladd (Belmont, California: Wadsworth Publishing Company, Inc., 1973), p. 96. Italics in original.

[57] See Ayer, Logical Positivism, p. 22.

[58] Gunnell, Philosophy, Science, and Political Inquiry, pp. 249-50. Italics in original. Again, Gunnell is quoting Euleau, "Tradition and Innovation," pp. 11, 12.

[59] Ayer, Logical Positivism, p. 22. Our emphasis.

[60] C.E.M. Joad, A Critique of Logical Positivism (London: Victor Gollancz Ltd., 1950), p. 111. Italics in original.

[61] Ibid., p. 111.

[62] Bertrand Russell, "What I Believe" in Why I Am Not A Christian and Other Essays on Religion and Related Subjects (London: George Allen & Unwin, 1975), pp. 43-52, passim.

[63] Joad, A Critique of Logical Positivism, p. 144.

[64] See footnote 58.

[65] See footnote 62.

[66] See footnote 20.

[67] See footnote 16.

[68] See footnote 62.

[69] See footnote 15.

[70] See footnote 60.

[71] Bertrand Russell, The Impact of Science on Society (2nd impression; London: George Allen & Unwin Ltd., 1959), pp. 110-111, passim.

[72] Jean Jacques Rousseau, Emile, translated by Barbara Foxley (London: J.M. Dent & Sons, 1974), p. 30.

[73] Ladd, ed., Ethical Relativism, p. 8.

[74] See footnote 11.

[75] Karl R. Popper, The Open Society and Its Enemies (2 vols.; 5th, revised, ed.; Princeton: Princeton University Press, 1971).

[76] Karl R. Popper, The Poverty of Historicism (3rd ed.; London: Routledge & Kegan Paul, 1961), p. 159.

[77] Popper, The Open Society, vol. 2, p. 276.

[78] See footnote 62.

[79] Popper, The Open Society, vol. 2, p. 278.

[80] Ibid., p. 278. It is interesting to note how the question of justifying our value decisions keeps nagging the mode 1 orientation. Popper for example, in spite of his above outlined position and in spite of insisting that such notions as "meaning" and "progress" are metaphysical and prevent us from becoming "the makers of our fate" (Open Society, pp. 279-280), still seeks the touchstone of some objective basis for making value decisions. Thus his heroic, but ultimately unsuccessful "Addenda" (a 1961 addition to The Open Society), struggles with the possibility that "the situation in the realm of standards -- especially in the moral

and political field -- is somewhat analagous to that obtaining in the realm of facts." (p. 369) Yet, in the end, he reluctantly admits "that the logical situation of the regulative ideas, of 'right,' say, or 'good,' is far less clear than that of the idea of correspondence of facts." (p. 385)

[81] Skinner, Beyond Freedom and Dignity, p. 206.

[82] See footnote 77.

[83] Popper, The Open Society, vol. 2, p. 396.

[84] Milton Friedman, Capitalism and Freedom (Chicago: The University of Chicago Press, 1962), p. 8.

[85] Ibid., p. 19.

[86] John Kenneth Galbraith, American Capitalism: The Concept of Countervailing Power (2nd, revised, ed.; Boston: Houghton Mifflin Company, 1956), p. 24. Galbraith, here, is speaking in the American context.

[87] Friedman, Capitalism and Freedom, p. 9.

[88] See footnotes 81, 82, 83.

[89] Massimo Salvadori, The Economics of Freedom (Garden City, N.Y.: Doubleday & Company, Inc., 1959), p. 201.

[90] See footnote 76.

[91] John Hobson, "Capitalism and the Consumer" in The Case for Capitalism, ed. by Michael Ivens and Reginald Dunstan (London: Michael Joseph Ltd., 1967), p. 99.

[92] Friedman, Capitalism and Freedom, p. 15.

[93] Hobson, "Capitalism and the Consumer," p. 100.

[94] Friedman, Capitalism and Freedom, p. 15.

[95] Ibid., p. 16.

[96] Ibid., p. 10. However, most importantly, it is not a sufficient condition -- as Friedman recognizes (p. 10). This merely reinforces the perceived need to keep the economic and political sphere separate.

[97] Bernard Bailyn, "The Problems of the Working Historian: A Comment" in Philosophy and History: A Symposium, edited by Sidney Hook (N.Y.: New York University Press, 1963), pp. 93-94.

[98] Ibid., p. 94.

[99] James L. Jarrett, The Humanities and Humanistic Education (Reading, Massachusetts: Addison-Wesley Publishing Co., 1973), pp. 92-93.

[100] J.B. Bury, "The Science of History" in Selected Essays of J.B. Bury, edited by Harold Temperley (Amsterdam: Adolf M. Hakkert, 1964), p. 4.

[101] Cited in Christopher Blake, "Can History Be Objective?" in Theories of History, edited by Patrick Gardner, a vol. in The Free Press Textbooks in Philosophy, general editor Paul Edwards (N.Y.: The Free Press, 1959), p. 330.

[102] For an excellent debate of this orientation see John O'Neill, ed., Modes of Individualism and Collectivism (London: Heinemann Educational Books Ltd., 1963).

[103] F.A. Hayek, "Scientism and the Study of Society" in O'Neill, ed., Modes of Individualism and Collectivism, pp. 59-60. Our emphasis.

[104] Ibid., pp. 59-62, passim.

[105] See footnote 16.

[106] See footnote 19.

[107] See footnote 101.

[108] Blake, "Can History Be Objective?", p. 340.

[109] See footnote 11.

[110] Karl R. Popper, Conjectures and Refutations: The Growth of Scientific Knowledge (Harper Torchbooks edition; N.Y.: Harper & Row, 1968), p. 27.

[111] See footnote 13.

[112] Blake, "Can History be Objective?," p. 311.

[113] Popper, Conjectures and Refutations, p. 23.

[114] Ibid., p. 27.

[115] Maurice Mandelbaum, The Problem of Historical Knowledge: An Answer to Relativism (Harper Torchbook edition, N.Y.: Harper & Row, 1967), p. 189.

[116] Fischer, *Historians' Fallacies*, p. 43.

[117] Maurice Mandelbaum, "Objectivism in History" in Hook, ed., *Philosophy and History*, p. 54.

[118] Fischer, *Historians' Fallacies*, p. 40.

[119] Mandelbaum, *The Problem of Historical Knowledge*, pp. 185-186.

[120] Albert Hofstadter, "The Philosophy in History" in Hook, ed., *Philosophy and History*, p. 231.

[121] Ibid., pp. 242, 243.

[122] See footnote 44.

[123] Popper, *Conjectures and Refutations*, p. 27.

[124] Fischer, *Historians' Fallacies*, p. 40.

[125] Mandelbaum, *The Anatomy of Historical Knowledge*, p. 26.

[126] Hempel, "Explanation and Prediction by Covering Laws," pp. 107-108. See, also, our earlier reference to this statement in footnote 41.

[127] Carl G. Hempel, "The Function of General Laws in History" in Gardner, ed., *Theories of History*, pp. 348-349.

[128] Paul K. Conkin, "Causation Revisited," *History and Theory*, XIII (1974), p. 6.

[129] Hempel, "The Function of General Laws in History," pp. 345; 346.

[130] Robert Berkhofer Jr., *A Behavioral Approach to Historical Analysis* (N.Y.: The Free Press, 1969), p. 247.

[131] Ibid., p. 249.

[132] Maurice Mandelbaum, "Historical Explanation: The Problem of 'Covering Laws,'" *History and Theory*, 1 (No. 1, 1961), p. 231.

[133] William Dray, *Laws and Explanation in History* (London: Oxford University Press, 1957).

[134] Raziel Abelson, "Cause and Reason in History" in Hook, ed., *Philosophy and History*, p. 168.

[135] Carl G. Hempel, "Reasons and Covering Laws in Historical Explanation" in Hook, ed., Philosophy and History, p. 158. Of course, as Hempel notes, there is always the possibility the agent may not be rational at all. This is skirted by Dray, but makes no fundamental difference to Hempel's rebuttal.

[136] Ibid., pp. 154-156. Italics in original.

[137] Dray, Laws and Explanation in History, p. 5.

[138] Mandelbaum, "Historical Explanation: The Problem of Covering Laws," p. 233.

[139] Gustav Bergmann, "Purpose, Function, Scientific Explanation" in Brodbeck, ed., Readings in the Philosophy of the Social Sciences, p. 219.

[140] See footnote 117.

[141] Morton White, "The Logic of Historical Narration" in Hook, ed., Philosophy and History, pp. 6-7. Italics in original.

[142] See footnotes 43, 44.

[143] Rudolf H. Weingartner, "The Quarrel About Historical Explanation" in Brodbeck, ed., Readings in the Philosophy of the Social Sciences, p. 357.

[144] Popper, The Open Society, vol. 2, p. 278.

[145] See footnote 62.

[146] See footnote 12.

[147] Popper, The Open Society, vol. 2, p. 278.

[148] Ibid., p. 278.

[149] Bergmann, "Purpose, Function, Scientific Explanation," p. 219.

[150] Carl G. Hempel, "Fundamentals of Concept Formation in Empirical Science" in Neurath et. al., eds., Foundations of the Unity of Science, vol. 2, p. 653.

[151] See footnote 127.

[152] Carl G. Hempel, "The Function of General Laws in History" in Gardner, ed., Theories of History, p. 345. Italics in original.

[153] Dray, Laws and Explanation in History, p. 59. Italics in original. Dray is directly referring to the views of Popper and Hempel.

[154] Ernest Nagel, "Determinism in History" in Ronald Nash, ed., Ideas of History, vol. 2 (N.Y.: E.P. Dutton, 1969), p. 350.

[155] Mandelbaum, The Anatomy of Historical Knowledge, pp. 122; 123.

[156] Conkin, "Causation Revisited," p. 9.

[157] Karl Popper, The Poverty of Historicism (London: Routledge & Kegan Paul, 1961), p. 67.

[158] Ibid., p. 117.

[159] Ibid., p. 128.

[160] Berkhofer, A Behavioral Approach to Historical Analysis, p. 288.

CHAPTER III

MODE II: 'METAHISTORY'

In virtually every aspect of approach, structure and method, mode II will provide us with an orientation which is the antithesis of the 'received view.' Those orientations which are alternately and loosely grouped under the terms 'speculative' philosophies of history[1] and/or 'metahistories'[2] provide the basis for the mode II world-view we will construct. Recalling the words of Bergmann we remind ourselves that, just as in mode I, we are dealing with a "movement rather than a school."[3] And, again, we are constructing a 'pure type' out of a "diverse intellectual heritage" which is, none-the-less, "at base a cohesive orientation."[4]

However, the influence of the orientations grouped under mode II has not been as consistent upon the philosophy of science and of history as that of mode I. At the beginning of the second chapter, we noted our agreement with Suppe that mode I exerted what he termed an almost "total dominance" over most of this century's philosophy of science. That prevalence was gained at the expense of mode II. As we shall see in the next chapter, the mode II orientation was dominant until well into the 19th century, and then suffered an eclipse. Mode I then gained ascendancy until it too encountered extremely serious setbacks. In the last quarter century, mode II has made a strong comeback and, in refined form, is again exerting an extremely strong influence on modern philosophy of science and philosophy of history. Not only is the mode II weltanschauung very much 'alive' it is remarkably, for lack of a better term, 'intact.' The essence of the orientation is fundamentally the same, and is (in spite of apparent differences) clearly identifiable in each of the schools and perspectives which we are grouping under the pure type we call mode II. And it is in turning to this essence of an intellectual orientation that we see how a world view which is so strikingly and diametrically opposed to mode I can be constructed. To fully comprehend this world view, we are again reminded that a "language shift"[5] is necessary. In mode II, we shall be approaching reality from a fundamentally new perspective, we shall be using wholly different categories in phantoming the construction of that reality, and we shall be utilizing a radically different conception of the mechanisms of that reality to explain its dynamics. Thus mode II is the antithesis of mode I.

In passing, before turning to mode II's ontology, we may mention that, like mode I, mode II has an identifiable intellectual mentor. Just as we acknowledge the central place of Hume in the intellectual heritage of mode I, we must recognize the pre-eminence of Hegel in the unfolding of this alternate orientation. Indeed, perhaps Hegel is an even more central intellectual force. Whereas, as we have seen, Hume was refined and even convincingly corrected, Hegel's thought forms a cernal of mode II which has endured much more intact. We are sympathetic with Dray's assertion that "never, after Hegel, were its claims so bold, or so brilliantly presented."[6] For our purposes, The Phenomenology of Mind and Reason in History are of particular significance.[7] We will not, however, in any way concentrate upon Hegel. To do so would be to make mode II something less than a 'pure type' of a world view in which many schools of thought and many individuals participate.

ONTOLOGICAL PRESUPPOSITIONS

Whereas mode I shunned ontological considerations, mode II considers them of utmost importance. Mode II argues that Popper's 'trivial' thesis, the thesis of the reality of the world, is indeed 'trivial' -- trivial in the sense of naive and simplistic. To perceive and acknowledge merely the empirical phenomena of the world is to perceive at a most superficial level. These are but manifestations of reality; these are epiphenomena. The essence of reality, its truly basic structure, lies behind these manifestations.

Thus mode II is a wholly 'metaphysical' orientation; metaphysical in the sense of being "concerned with the supra-physical."[8] Far from treating metaphysics as a 'disease' [as in mode I], mode II insists upon the need to shed the illusory world of sensory, empirical, phenomena to uncover a deeper sub-stratum underlying such phenomena.

Correspondingly, the philosophical orientation of mode II is inherently 'speculative,' as "speculative philosophy promises to provide the scheme of basic categories which comprehend all the elements of reality and experience in a coherent system."[9] The 'system' which underlies empirical phenomena is reality; it is not a mere schematization or convenient abstraction. Thus the antithesis of mode I takes the form of: (1) a rejection of phenomena as the primary object of study and (2) a reification of the relations phenomena enter into. Whereas in mode I relations were symbolic formulations which at best could describe a causal sequence, in mode II the relations are concrete and perceived as a 'force' which actively 'orders' passive empirical entities.

The nature of this structure is, however, in debate. We have noted that speculative philosophy attempts to "comprehend all the elements of reality and experience in a coherent system." However, as Reck immediately goes on to remind us, "speculative philosophy has encountered a disarray of its own making -- the multiplicity of its own types. . . . [there are] rival and even opposing systems."[10]

There are many ways we could differentiate between types of metaphysical systems. For example, we could focus upon the, for lack of a better term, 'distance' between empirical phenomena and the underlying sub-stratum of 'true reality.' Thus we note that Western religious metaphysical systems tend to speak of an 'Entity' which is 'behind' the ordering of the cosmos. There the active, ordering, force takes the form of a Divine Will -- and this Will is the object of our study as it is the mechanism ordering empirical existence. This 'Will' indeed 'acts upon,' but is not really an intimate 'part of,' empirical reality. It keeps its distance. On the other hand orientations such as, for example, vitalism perceive empirical reality as truly 'one' with its underlying base. There, the sub-stratum is so intimately joined to the phenomenal level that to attempt to separate the two would be seen as reductionism or unwarranted rationalistic abstractionism.

For our purposes however, another distinction is much more heuristically fruitful. We wish to stress that, although all speculative systems are opposed to a purely materialistic ontology, some systems are more antipodal to mode 1 than others. This point is important as, because we are establishing 'pure types,' we wish to identify a position which is truly antithetical to mode 1. Thus we wish to differentiate between 'static,' 'transhistorical' systems and 'dynamic,' 'evolutionary' systems. The latter more fully exemplify the mode II perspective. For example, the Platonic 'theory of Ideas' with its emphasis upon eternal and unchanging 'verities,' metaphysical as it may be, still agrees with mode I on the proposition that reality can be comprehended in terms of exclusive categories. Thus while mode I postulates a universe populated with 'atomic' empirical entities [individual, distinct, material entities], the Platonic 'categories' identify separate, autonomous, 'forms' of existence. In the former, qualitatively distinct physical entities retain separate ontological identities; in the latter, qualitatively distinct metaphysical entities retain separate ontological identities.

The structural similarity of these two ontological orientations becomes evident when we consider that both can be analyzed through the deductive schema of formal, Aristotelian, logic. This becomes especially important as an epistemological consideration. As we shall soon see, although these two ontological entities greatly differ, we can conceptualize them and understand their mechanics through the employment of formal logic. Thus both Platonic idealism and positivistic materialism are comprehensible (once we accept their ontological differences) through the "three fundamental laws of formal logic": the law of identity; the law of contradiction; the law of the excluded middle.[11]

However, an orientation truly antithetical to mode 1 postulates a dynamic underlying metaphysical structure as its ontological foundation. Such an underlying structure is not antithetical to mode 1 only because it is metaphysical; it is antithetical because it insists that reality is in a state of qualitative flux. The very sub-stratum -- as well as the phenomenal level -- is undergoing constant changes at the very level of ontology.

Thus much more than the notion of 'deep-structure' -- structure as something which 'underlies' and 'gives order to' empirical phenomena -- characterizes mode II: in mode I the concern was with naked existence; empirical reality is the stopping point of inquiry. In mode II, an underlying structure is the 'ultimate reality' and therefore the ultimate object of inquiry. In mode I, discrete material entities, each possessing their own distinct ontological integrity, were the ultimate constituents of an 'atomic universe' (i.e. a universe of "completely independent" or at most "contingently related" entities[12]). In mode II, we conceive of a dynamic universe, in constant flux, wherein wholesale qualitative changes take place. In mode I formal logic employs exclusive categories to sort the universe into its discrete essences. In mode II we see the need for a dialectical logic wherein classifications of unchanging essences are replaced with a conceptual schema which incorporates constant changes in the fundamental ontological deep-structure.[13]

Consequently, in mode II, empirical phenomena merely serve as clues to the changes occurring within the underlying, dynamic, deep-structure. And the notion of dialectic makes acceptable qualitative phenomenal change, while hinting at an underlying order to these changes.

CONGRUENT EPISTEMOLOGIES

That mode II accepts the notion of 'order' at the level of deep structure, while simultaneously embracing the concept of constant ontological flux, is an epistemological necessity. After all, if changes are wholly random, then how can we possibly 'know' reality? Anarchy can hardly be a basis for a coherent theory of the world or of knowledge. Similarly, if qualitative change is constantly taking place, how can we be sure we perceive any real order in this constant flux? To resolve this dilemma, we need to appreciate that mode II is inherently an 'historical' orientation. Observing changing events in time reveals that flux is indeed 'lawful,' and lawful changes are seen to be progressing dialectically.

Turning to the inherent historicity of this orientation, and illustrating how this contrasts with mode I, we recognize that history and science are fundamentally different as "science is still based on the old assumption of the stability, immutability, and immovability of nature, which alone makes the establishment of 'laws of nature' possible."[14] The 'stability, immutability and immovability' referred to is the result of establishing unchangeable ontological categories. We have seen that in mode I the ultimate constituents of the universe are ontologically discrete 'atomic' entities [like Plato's 'Forms' -- which are a metaphysical version of absolutist categories]. These entities interact, and this causes 'change' in the world. This is not, however, change at the level of deep structure: the entities engaged in interaction can always be recovered and shown to be unchanged by the process of interaction. Thus observation over time, although documenting many phenomenal changes, yields little new ontological insight.

In mode II, however, entities do much more than merely 'interact' over time: the entities themselves qualitatively change. To comprehend these changes, we must observe reality not with any expectation of finding transhistorical laws governing the interaction of autonomous ontological entities, but with the expectation of finding a lawful development -- a constant progression of qualitative changes -- occurring over time. We must abandon the concept of mechanical causality for a concept of lawful, dialectical transformation. The notion of law is, therefore, fundamentally different in our two modes. We have to conceive of laws as

> quite unlike the general assertions usually found in the natural or social sciences. Rather than stating 'invariant relations within history,' which could be expressed hypothetically in the form 'If C then E,' they would state categorically the invariant trend of the historical series as a whole.[15]

Above, Dray is referring specifically to the study of the human past. But the point illustrated is a larger one. 'Invariant relations' of the sort 'If C then E' are not possible in the mode II perspective because C and E are themselves constantly changing. Over time C and E will become qualitatively different entities. Consequently the only 'lawlike' behavior we can expect from concrete entities is that there is an "invariant trend of the historical series as a whole." At the level of physical phenomena, this takes the form of recognizing that matter itself is constantly changing form -- i.e. conversions such as mechanical to electrical energy or mass to heat energy; loss of energy through radiation; irreversible chemical changes; constant mutations at the organic level; etc. At the level of human history, it forces recognition that 'C' and 'E' cannot be abstracted from their spacio-temporal moment because time has changed not only these entities but the milieu of their interaction. Thus to seek an invariant relation between C and E in isolation is overly reductionist, belying the complexity of the historical reality. [Such 'invariant relationships' may, of course, be formulated -- but merely for convenience. They serve as 'rules of thumb' which reflect an overall apparent stability of the world at the phenomenal level. However, the underlying ontological flux must not be obscured by such convenient generalities.]

But to see an overall pattern, a general line of development, in physical and social situations is not reductionist. To infer from empirical reality what we previously termed 'clues' is to attempt to grasp, in broad outline, the order and unity underlying ever-present change. That such order and unity does underlie physical reality is obvious from the stability of the physical universe. That such an underlying order and unity exists in history is equally obvious:

> Even without any explicit principle of comprehension, or any adequate philosophy or theology of history, the most cursory examination of history will yield certain tangents of coherence and reveal minimal relations of unity.[16]

Neibuhr's 'cursory examination' is mode II's equivalent of Popper's 'trivial thesis.' The 'obvious' lessons of human existence are: there is an underlying unity to reality, at the level of deep structure, and that underlying unity must be conceived in dynamic terms -- a dynamism which is essentially historical as the unity is to be found in a pattern which is difficult if not impossible to comprehend by concentrating upon any one point along time.

The obvious inadequacy of formal logic to deal with dynamic, qualitative, change over time necessitates a new analytic tool. Just as mode II has a unique conception of law, it is in need of a unique logic to describe the operation of these dynamic laws. A new logic is necessary as mode I, because it seeks to affect the "subsumption of the [specific event] under principles which have the character of general laws,"[17] is, as we have seen, able to wholly utilize Aristotelian syllogistic logic to act as the model for 'explaining' specific events. The specific event is 'understood' when it is shown to be an instance wholly subsumed under a more general class of events. Such reductionism is not possible when we introduce the notion of qualitative transformation. Now entire classes of events change, and one class cannot be understood in terms of -- i.e. 'reduced to' -- the other. It is here that the need for a dialectical logic emerges, as mode II breaks with the formalism of the Aristotelian law of the 'excluded middle.'

The fundamental disparity between mode I and mode II is well illustrated on this point of logic. Popper for example, in his classic "What is Dialectic?," takes great effort to show that dialectical logic is vacuous because "dialectic is vague and elastic . . . Any development whatsoever will fit the dialectic scheme."[18] This, ironically, is merely to say that dialectics is not positivistic (hardly a criticism in the eyes of mode II) -- that is, it is not content-specific and does not demand its terms to be "phenomenally formulated." Something quite apart from the phenomenal object itself is that which is to be 'known.' The object of study is the underlying dynamic trend, and that overall pattern of movement is not content-specific. All that any specific phenomenal moment does is illustrate but one aspect of the underlying flow. As Novack states: "there are threads of lawfulness running through the process of reality and exhibited in the existence and persistence of its products."[19] The perception of these threads is our task. Thus dialectic movement does indeed apply to everything -- but that does not make it vacuous. Rather, it is an appropriate and necessary approach toward beginning to grasp the underlying unity of all events, a unity which incorporates qualitative deep-structure changes with apparent stability at the phenomenal level.

It is the perception of such underlying dynamic, qualitatively changing, unity that is the true epistemological quest. In the Hegelian notion of dialectic

> 'for the first time the totality of the natural, historical and spiritual aspects of the world were conceived and represented as a process of constant transformation and development and an effort was made to show the organic character of this process.'[20]

This ontological postulation, wholly opposite to mode I, consequently demands the formulation of a different logical framework. Thus mode II turns to dialectics which is "the logic of movement, of evolution, of change."[21] Dialectical logic, built upon this principle of dynamism and ontological evolution, recognizes that:

1) A not only equals A but also equals no-A. Hegel made this law of the identity, unity and interpenetration of opposites the basis of his dialectical system of logic.[22]

2) [Thus we must do away with the notion of immutable 'essences' or 'absolute' categories of existence and reality.]

> ... essence in general, and each particular essence, has, like everything else in this world, a material and historical character. It comes into being under specific conditions, develops into and through various forms, and eventually goes out of existence, together with the perishing of the thing itself.[23]

> 3) [The principle of 'negation' is a recognition that]
> The real truth about things is that they not only exist, persist, but they also develop and pass away. This passing away of things, eventuating in death, is expressed in logical terminology by the term 'negation.' The whole truth of things can be expressed only if we take into account this opposite and negative aspect.[24]

> 4) [This is because negation is the opposite of the process of 'affirmation' -- the process whereby a dynamic, lawful, evolutionary, deep structure creates qualitatively new forms or 'essences.']
> ... everything comes into existence and remains there, not by accident, but as the result of determinate conditions and necessary causes. There are threads of lawfulness running through the process of reality and exhibited in the existence and persistence of its products. There is reason in the real world -- and therefore the real world is rationally reflected and translated in our mind.[25]

> 5) [That is why]
> Hegel also talked of 'the power of the negative,' thinking that there was always a tension between any present state of affairs and what it was becoming. For any present state of affairs was in the process of being negated, changing into something else. This process is what Hegel meant by dialectic.[26]

Mode II's aforementioned ontological quest finds realization in discovering (1) that there is an ontological 'deep structure' below the phenomenal level, (2) that deep-structure is in constant qualitative flux, (3) that flux is orderly and lawful because (4) it proceeds dialectically, (5) carrying along the course of events (6) of which sensory phenomena are but manifestations.

It is at this point that mode II achieves the intellectual scope which mode I attained under the formulations of Popper and Hempel. All disciplinary boundaries are crossed and mode II becomes a comprehensive world view, finding full agreement with Popper that

> . . . there is at least one philosophical problem in which all thinking men are interested. It is the problem of cosmology: the problem of understanding the world -- including ourselves, and our knowledge, as part of the world.[27]

However the method of attaining such insight (the dialectical orientation) was, as we have seen, radically opposite to mode I's approach. Furthermore, the epistemological consequences are also profoundly at variance. Because empirical reality is the epistemological stopping point in mode I, there is no conflict between 'appearance' and 'reality.' Appearance (in the strict sense of quantifiable positivistic phenomena) is reality. In mode II, however, the phenomenal, experiential, level provides but hints to the ontological reality our epistemology seeks to ascertain.

> The divergence and coincidence of appearance and reality are especially important in understanding how knowledge progresses from everyday experience to scientific insight and foresight. Things as they are first manifested to us have contradictory and confusing characteristics which are both leading and misleading. Their immediate presentation can conflict with their real state. At the same time these phenomena provide clues

> which can expose the deceptiveness of the outward show and open the way to a grasp of their basic content, since essence presents itself in and through diverse appearances.
>
> One familiar instance of this divergence between appearance and reality is the relation of the earth to the solar system. The sun seems to be revolving around the earth whereas we now know that the earth, like the other planets, is orbiting around the sun. The discovery by Copernicus of the rotation of the earth on its axis and its motion around a fixed sun opened the modern epoch in astronomy.
>
> At the same time it is understandable why the other celestial bodies seem to be moving around the observer situated on earth. In the scientific picture of the solar system, both the apparent and the real motions are interconnected and explicable.
>
> One of the main aims of science is to resolve the conflicts between the outward forms and the inner reality of things by demonstrating their dialectical unity. Knowledge advances by probing beneath, behind and beyond appearances to ever deeper levels of real existence.[28]

And finally, the lessons such insight yields and the social consequences of the mode II perspective are, as we shall see immediately, no less antithetical to mode I.

CONGRUENT GENERAL AXIOLOGY

(i) Education

We have seen, in Chapter II, that mode I: offered a wholly unambiguous definition of knowledge ["all cognitively significant discourse about the world must be empirically verifiable"[29]); its empirical epistemology yielded a behavioral pedagogy and psychology ["the point of education can be stated in behavioral terms"[30];

the only criterion for judging the 'value' of what is learned is the requirement that the knowledge be empirically verifiable -- there is no way to differentiate between the 'value' of empirically true assertions [i.e. 'knowledge'] as there is no reference point from which such assertions can be placed into an hierarchy. Mode II's educational perspective differs radically.

First, we have seen that empirical phenomena are deceptive in that they "have contradictory and confusing characteristics . . . their immediate presentation can conflict with their real state."[31] Thus a behavioral pedagogy is inadequate because behavior -- like all phenomena -- is superficial. The true aim of education is to transcend the level of 'appearance' to unearth underlying reality. Thus while most people, as Hook notes, "remain on the level of everyday understanding"[32] the task of education (as both subjective process and educational theory) is to see further and recognize that we are all part of an unfolding process, an emerging pattern. Thus education (as 'learning' and 'pedagogy') cannot be stated in behavioral terms. Education is, rather, a continuing quest to perceive behind the illusion of 'appearance' to expose the dialectically dynamic ontological underpinnings of reality and to reveal the inter-connections of a wholistic world. As Kahler, echoing Hegel, conjectures:

> It may well be that we, all of us, are unknowingly enmeshed in a vast and somehow dynamically coordinate coherence, just as a cell is unaware of the organism to which it belongs.[33]

The very essence of mode II is the unequivocal assertion that there is indeed "a vast and somehow dynamically coordinate coherence," and that 'coherence' is both metaphysical and dialectical. Thus epistemology translates itself directly into an educational doctrine which shuns behavioral objectives and strives, instead, for verstehen. This is, emphatically, not the verstehen of a Dilthey which has spawned an epistemology of relativism based on a phenomenological intuitionism wherein an "object must be understood before it is known, and it always remains more understood than known."[34] It is, rather, the excruciatingly rationalistic and systematic "sphere of Understanding, of Intelligence" of Hegel where "singleness and universality" are perceived to "both essentially exist in a single unity."[35] And this leads to the single greatest educational and epistemological contrast between mode I and mode II.

We have noted that mode I could not differentiate between the 'value' of different assertions it would accept as 'true' (i.e. empirically verifiable statements). Mode II, by rejecting the criterion of positivism, by treating empirical events as "contradictory and confusing" and often actually obscuring the "inner reality of things," invokes us to seek "beneath, behind and beyond appearances to ever deeper levels of real existence."[36] Once we attain such insight, we have solved what is a major enigma for mode I. Now we can 'decide' which empirical facts are more 'important' ('significant,' 'relevant,' etc.) than others because we have an independent reference point -- reality itself becomes the criterion by which we can judge empirical knowledge. This is the culmination of what Dray terms the "three questions" which "speculative systems'" epistemological methodologies address: (1) What has been the pattern of the past? (2) How does historical change take place -- i.e. what is the "mechanism of history"? (3) What "purpose or value or justification can be found for a process having the pattern and mechanism history is alleged to have"?[37]

Because mode II claims to provide answers to (1) and (2), "speculation becomes inseparable from metaphysics, ethics and religion."[38] We are provided with clear criteria of significance for "facts": To what degree do they illuminate underlying reality?; do they enable us to understand our place within the gigantic, evolutionary, 'system' we find ourselves? Thus all 'true' assertions may [as in mode I] be phenomenally equally true; but not all are equally important. The underlying ontological reality provides a touchstone by which we may judge precisely which knowledge best helps us to understand what Geyle aptly terms the "cosmic process" mode II believes we are part of. Education is the diligent task of seeking an ever-clearer comprehension of this reality:

> In this, in the feeling that by understanding the cosmic process one has become its master -- in the resulting conviction that one's particular beliefs have the sanction of destiny and are invincible -- lies the chief attraction which the system [Hegel's] has exercised, and through some of its later adaptations still exercises, on so many minds.[39]

This defines the whole of mode II's educational perspective: we must continually clarify our vision of the underlying reality within which we are so intimately intertwined because, as Dray noted, it is within that pattern that we find "purpose" and "value," and it is from this reference point that normative judgments may be made. Existence is no longer 'mere existence.' It is a dynamic, evolutionary, lawful, dialectical unfolding of a reality of which we are all part; a reality which is discernible; a reality against which all events, ideas and actions may be judged.

Mode II thus assigns a great priority to 'learning' -- learning not in the sense of skill mastery but learning in the sense we have noted, the sense of 'understanding.' Mode II overcomes the dilemma of mode I which made all knowledge merely 'relative' by making knowledge 'relative to' a deeper reality. Because we now have a starting point, an independent 'source' for our investigations, all of our ideas and actions can be judged in reference to that independent reality. That is why Dray is correct in asserting that "speculation becomes inseparable from metaphysics, ethics and religion." Indeed, it is inseparable from all aspects of our social and intellectual lives. As we shall see, mode II provides us with a touchstone which gives direction to, and provides meaning for, the whole of our normative existential being.

(ii) Ethics

Speaking from the perspective of mode I, D.H. Monroe questioned:

> Moral propositions cannot be verified by the evidence of the senses. Are we then ever justified in making them? Moreover, what do such assertions

> mean? If words like 'ought,' 'good,' 'right' do not refer to anything that can be observed, what do they refer to?[40]

Mode I's answer to Monroe's question leads to ethical relativism. As Taylor notes, "the ethical relativist claims it is logically impossible to give good reasons . . . for or against moral judgments."[41] Moral judgments cannot invoke 'good reasons' because "these arguments do not," in the phrase of Ayer, "work in the same way that logical or scientific arguments do."[42] Indeed they cannot so work because, in the term of C.E.M. Joad, there is no "ground"[43] for such assertions. In the perspective of mode I, no such ground can exist.

In mode II, however, there is indeed an ontological 'ground' for normative decisions. All human actions assume 'meaning' because all men are intimately inter-related, and all are part of a greater whole:

> Meaning signifies coherence, order, unity of diverse happenings and phenomena, as grasped by a comprehending mind. When we say that something has a meaning we want to indicate that it forms part of something larger, or superior to itself, that it is a link, or a function within a comprehensive whole, that it points to something beyond. Or, that this something represents in itself a consistent whole, a coherent order in which the parts relate to each other and to the whole.[44]

Because we are such "links," our actions must be seen as somehow affecting the "function" of the entire "comprehensive whole." Mode II recognizes the inherently social aspect of human existence; a social aspect which goes even beyond the boundaries of the human race to all of reality. It matters not whether we conceive of this ecologically (man as part of a delicate biosphere), religiously (man as part of God's unfolding plan), anthropologically (man as a continuing part of culture), in terms of the Hegelian development of the "World Spirit," or in other ways. The point is, we must grasp "the organic character, the dynamic wholeness of the historical process."[45] Because of the existence of an underlying dynamic unity to existence, and because of the dialectical unfolding of that pattern, it is clear that normative judgments must be made in reference to that underlying reality. Because nothing can be done in true 'isolation' from that underlying reality, the conduct and course of human events must be correlated with reality itself. Thus Hook is correct in asserting of Hegel:

> His whole philosophy is an elaborate attempt to shift moral responsibility from the individual acts of individual men to the impersonal whole of nature and history.[46]

Hook's assertion holds for not only Hegel but for the entire mode II perspective. Because reality is progressing in a definite direction through history, the underlying ontological reality our epistemology uncovers provides all the 'lessons' which we need to guide our lives. Whereas Bertrand Russell can claim that "outside human desires there is no moral standard,"[47] mode II recognizes a moral standard in reality itself. Because reality is evolving in a specific direction, and because man is part of that reality, his moral judgments -- like all his judgments and actions -- have an influence upon that evolution. Man, in everything he does, either hinders or facilitates that evolution.

Thus three conceptions of 'morality' are possible. If the evolution of reality is 'progressive' -- i.e. if it, like Hegel's World Spirit, is evolving to higher and higher syntheses which are ever more desirable and liberating, then 'moral' actions are those which facilitate this evolution. Alternately, if this evolution is 'regressive' -- i.e. if reality is devolving from a 'golden era' toward an eventual Armageddon marking the destruction of its finer elements -- then 'moral' actions are those which hinder this plunge into depravity. Of course if this evolution is 'cyclical' then, at alternate moments, assisting and resisting the flux of reality are moral imperatives.

The above considerations readily yield three conclusions. First, we have extreme difficulty in even speaking of mode II without invoking 'value-laden' terminology: history is 'progressing' or 'regressing'; individual 'meaning' is evident because of the structure of the "coherent whole"; individual actions 'assist' or 'retard' the development of the whole. Because all events are instances of a deeper, underlying, reality they are no longer 'mere events.' All actions of men are to be judged from the larger perspective of the unfolding of history itself. This is the second conclusion: mode II is an inherently 'historical' orientation. We can be either 'progressive' or 'regressive' forces within the unfolding of history, but we are all agents of history. We cannot escape the consequences of our actions because all actions affect the historical progression of reality. Of necessity, then, all our actions have a moral dimension. And finally, because of the fact that the development of history becomes the yardstick by which we evaluate our own temporal ethics, men are not 'free' in that we are all caught in the tide of historical evolution. We can resist or assist that tide, but in the end it will sweep us along.

(iii) Politics/Economics

Because we are all being so swept along, mode II becomes very explicitly and consciously an extremely political orientation. We have seen that mode I waged a fierce battle against 'authority' in social affairs because all such authority rested ultimately upon "metaphysical foundations."[48] To reject authority is to be able to "live without the delusion of subjective certainty."[49] Mode II reverses this state of affairs. As we have seen mode II, precisely because it is built upon "metaphysical foundations," insists that "subjective certainty" is anything but a "delusion." Because humanity is caught in a "predetermined pattern" which exists "out of time and yet in some mysterious way pervades events in time," the duty of men is "translated ultimately into political action, of what the world order is to be."[50]

This necessarily follows from the fact that men cannot be 'neutral'; they are either in the 'progressive' or 'regressive' camp vis-a-vis the unfolding of history. Whereas in mode I Popper cautioned the politician against "fighting for 'positive' or 'higher' values"[51] because in the mode I perspective one cannot establish any values outside of Russell's "human desires," mode II clearly sees an evolution of history toward "positive" and "higher" values. [Alternately, there could be a devolution, but the principle remains the same.] In mode I "facts, whether those of nature or those of history, cannot make the decision for us, they cannot determine the ends we are going to choose."[52] It is therefore "up to us to decide what shall be our purpose in life, to determine our ends."[53]

In mode II, however, "nature" and "history" do indeed clearly "determine our ends." These ends are outside the individual human being, and it is up to us to conform to them. We may all choose to be on the progressive side of history; a 'vanguard' may take that role upon itself; or -- as in Hegel -- the reification of the 'progressive' element of history can take the form of a 'hero' who is the "necessary link in a necessary chain of a necessary historical pattern."[54] All this is, of course, enough to make adherents of mode I wince in horror. But from the perspective of mode II this is a mere bowing to the 'inevitable' course of history -- a recognition of 'manifest destiny.' Political pluralism -- the tenet of mode I -- is wholly frivolous, indeed reactionary, when the course of historical destiny is understood. The inevitable cannot be held back. Thus:

> Hegel was confident when he saw Napoleon near Jena that he was beholding 'the world soul on horseback.' But he was even more convinced that if it had not been Napoleon it would have been someone else who would have carried out the dictates of 'the cunning of reason' . . .[55]

This tendency toward political certainty -- indeed inevitability -- based upon the perceived emergence of the pattern of history is what makes mode II such a political orientation. Important economic consequences follow.

In mode II, as in mode I, it is recognized "that there is an intimate connection between economics and politics, that only certain combinations of political and economic arrangements are possible."[56] Thus, just as mode II rejects ethical and political pluralism, so too it rejects laissez-faire capitalism.

We concluded at the close of our discussion on mode I's politics/economics that, because we cannot make 'value' judgments, "we can never judge the value of the [economic] system itself: how 'just' is the distribution of goods? Are business practices 'fair'? Are the physical products of the system 'desirable' commodities? etc." Mode II, precisely because it claims to be able to make value judgments, judges economic praxis just as it judges any other praxis. Namely, it asks if the economic system is hindering or accelerating the desirable course of historical evolution. From this perspective the 'justice' of goods distribution, the 'fairness' of business practices, the 'desirability' of the system's products -- as well as the desirability of the system itself -- are evaluated.

Obviously, the rationale for political control of the economic system -- to ensure that it serves the 'course of history' rather than 'individual caprice' -- is fully evident. As Friedman noted in our discussion of mode I, "if economic power is joined to political power, concentration seems almost inevitable."[57] In mode II, such concentration is seen to be not only desirable but indeed necessary for the optimal development of our historical destiny. The implications of this tendency toward centralization for all aspects of the social fabric -- educational, religious, etc. institutions -- are clear.

HISTORIOGRAPHIC CONSEQUENCES

Before turning our full attention to the historiographic consequences of the mode II perspective, three points demand clarification. First, although mode II insists there is a pattern in reality which is dialectically unfolding, we have seen that this pattern need not be a 'progressive' evolution. Logically, it could just as easily be regressive or cyclical.[58] The fact is, however, the great majority of orientations compatible with mode II -- of which the 'purest' example of the 'pure type' we designate mode II is the Hegelian perspective -- have indeed insisted that reality is evolving 'progressively.' Even where 'cyclical' patterns have been advocated, the cycles (as we shall soon see) are not static but themselves are more evolutionary 'snowballing' or 'spiraling' cycles. Thus, for simplicity, we shall continue to speak only of a progressive evolutionary pattern in mode II.[59]

Second, we recognize that we have been much less precise both in our terminology when discussing mode II, and in identifying the specific structure of this pure type. This lack of specificity in terminology is inherent in the perspective itself.

Whereas mode I, by insisting that cognitively meaningful language must be cast phenomenally, was able to attain an extremely precise vocabulary, mode II is concerned with a metaphysical base and this is obviously much more difficult to communicate. Here shared meanings are much more elusive. The further lack of specificity in terms of a clear identification of the specific structure of the mode II pure type is attributable to Reck's aforementioned observation that "speculative philosophy has encountered a disarray of its own making -- the multiplicity of its own types. . . . [there are] rival and even opposing systems."[60] Mode I, on the other hand, has had a clear line of development, and emerged as a coherent orientation with subscribing subschools which are in remarkable agreement. The mode II perspective, however, has affinity with many fiercely competing schools. Nevertheless, these schools' disagreements quickly lose significance when, as a group, they are compared with mode I. In our discussion of the ontological presuppositions of mode II is the clearest statement both of the antipathy of mode II to mode I, and the fundamental areas of agreement of all orientations compatible with mode II. Specific reference to the historical schools closest to the mode II pure type will be made in this final section of chapter III, and further illustration will be forthcoming in chapter IV.

Finally, the discussion of mode II has necessarily tended toward repetition. In mode I, we saw that ontology provided but a tenuous, negatively defined, start in building that world view. The mode I weltanschauung emerges slowly before our eyes, being built block upon block, and becomes fully comprehended only after its axiological and praxiological manifestations have been meticulously developed. Only then does mode I reveal itself as a unified, comprehensive, cognitive 'package.' The totality of mode II, on the other hand, is much more readily deduced from its ontology. Indeed mode II _is_ ontology, and once the ontological presuppositions are granted a general sketch of the whole perspective quickly emerges and we are immediately able to 'see the whole picture.' Thus the 'links' -- epistemological, axiological and praxiological -- in the mode II world view are much more readily perceived. [Indeed, mode I is even hesitant to admit that it is a 'total package' as a world-view. By attempting to greatly restrict the 'legitimate' extension of 'theory' to 'practice,' by insisting upon a clear separation between 'facts' and 'values,' and by accepting only relativism -- the Popperian ideal of an "open" intellectual, political and economic society -- as a social tenet, mode I illustrates its abhorrence of any, to use Hook's words, 'necessary linkages.' This is part of its insistence on subjecting everything to continual critical scrutiny.]

To continue. We shall see the clearest concrete application of the mode II world view -- and coincidently even more clearly reveal its antipathy to mode I -- in the ensuing discussion of its historiographic consequences. As we have noted, mode II is an inherently historical orientation because history is the medium which gives evidence of the evolution of reality. Consequently history, as both discipline and subject, assumes a pre-eminence undreamed of in mode I.

(i) Object of Historical Study

Whereas mode I is wholly occupied in a search for only empirical facts, mode II obviously seeks to reveal the intricate web which is the unity underlying such facts. Since history itself is the process wherein the pattern of evolution reveals itself, mode II is concerned with "asserting patterns as historical facts."[61] Importantly, these patterns are not, as in mode I, "'wholes' . . . [which] do not exist for us apart from the theory by which we can reconstruct the connections between the observed elements."[62] These "wholes" are much more than Hayek's "schematic representation or 'theory' of the persistent system of relationships between the ever changing [phenomenal] elements."[63] Although the "elements" may and do change, the "persistent system" within which all entities are enmeshed is much more than a convenient 'theoretical' construct. That system is reality itself; it is that system of relationships which unfolds unceasingly through time and which the historian seeks to reveal in all its detail.

To reveal that system of relationships is to become conscious of Kahler's aforementioned "vast and somehow dynamically coordinate coherence" in which we are "unknowingly enmeshed."[64] Thus we must go beyond Hayek's "single observable things"[65] to giving ontological status to those supra-individual, wholistic and consequently 'metaphysical' entities disavowed by mode I. In the perspective of mode II

> Man is more than the sum total of human beings -- even a collective group of people is demonstrably more, or something else, than the sum total of its individuals. A nation is more than all of its nationals; . . . [it is a] . . . complex of characteristics, forming a character, a 'civilization,' [which] has a real existence of its own, it is no mere abstraction.[66]

This is the "notion of man . . . as a supra-ethnic historical entity, and of history as one, unique, coherent course of human development."[67] But this is not to imply that the supra-individual entities are static or fixed entities, or that the 'pattern' of historical development is a mechanical, linearly cumulative, progression. History documents a dynamic, dialectical, evolution of reality yielding qualitative changes. Constant change is in evidence, but an underlying, orderly, substratum -- dialectical in its dynamics -- does exist. That is the object of historical study; that is the true historical entity to which empirical historical 'facts' provide 'clues' toward recognition. We must "conceive of integral history, that is, history as a single and singular, never recurring flow of happenings, passing through and beyond the individual peoples, history as the career of humanity proper."[68]

The Herculean task of the historian is therefore nothing less than uncovering the metaphysical, dialectical, evolutionary ontological basis of reality itself. It is true that he shares this endeavour with the philosopher, the political leader, the scholar, and the cleric. But, because the underlying evolution of all reality is most evident in the pattern of the past, the historian is a detective whose 'clues' -- i.e. empirical historical facts -- provide him with unique opportunities to glimpse the substratum underlying the course of history. Whereas in mode I the object of historical study was the empirical fact, in mode II the object of study is the metaphysical and evolutionary ontological basis of our existence which reveals itself in a dialectical succession of phenomenal events -- a succession which carries men, societies and civilizations along in time. Mode I's criticism that a precise identification of the metaphysical base of that course of events we call 'history' has been the subject of heated and seemingly endless debate [by definition a nonsensical debate from the mode I perspective] leaves mode I undaunted. Such a base does exist; that base must be the ultimate object of historical inquiry; that base is ultimately comprehensible because its dynamism is orderly in that it is dialectical. The multiplicity of discrete, atomic, 'facts' which confront the adherents of mode I are made 'sense' of by realizing that there is a deeper level of reality 'behind' these phenomenal manifestations. Thus, in spite of the diversity of 'facts' which threaten to overwhelm the historian, "in all intelligent historical quest there is . . . a discreet, tentative search for the typical and recurrent in the actions of man (even in his unreason), and a search for a morphology of human affairs."[69] Mode II carries Namier's cautious thought to its fullest logical extension.

(ii) Method of Study

(a) Objectivity

In consequence of its ontological position, epistemological criteria of 'objectivity' become much more problematic in mode II than they were in mode I. From a materialistic ontology we can readily derive fairly straight-forward criteria of objectivity: the epistemological ideal is that of 'direct,' 'positive,' observation. Although as we saw in chapter II this presented some problems for mode I, the difficulties were not insurmountable.

Mode II's difficulties are much more fundamental as there are really three aspects to what constitutes 'objectivity' in mode II historical study. First, we have noted that empirical historical facts provide clues to the underlying process of history. Thus the mode II historian, just as much as the mode I historian, must be cognizant that "there are problems of genuineness, there are problems of bias, and there are also such problems as the reconstruction of earlier sources."[70] These are problems affecting our ability to establish empirical historical facts and they are very troublesome. Nevertheless, as mode I demonstrated, they can be overcome to a significant degree and the fortunate result is that "among the working canons of historians are standards for determining the accuracy or reliability of sources."[71] That much mode II's criteria for objectivity have in common with mode I.

However, a second aspect of 'objective' historical inquiry for mode II violates Hayek's tenet of 'methodological individualism.' Mode I allowed recognition of only phenomenal "elements which alone can be directly perceived" as a result of their "physical attributes" and shunned the granting of ontological status to "wholes" such as "government or trade or army or knowledge" on the justification that such entities "do not exist for us apart from the theory by which we constitute them."[72] For mode II, however, such 'wholes' are real; indeed, they are even more real than the entities of which they are composed. Because relationships are so vital to mode II ontology and epistemology, and because the universe is not populated with mere aggregates but rather with qualitatively existent "wholes," mode II agrees with Hofstader that "the primary subject of history is . . . the superindividual group, with its associations, institutions, and practices. . . . group life is more than the sum of individual lives."[73]

Such a recognition is necessary because groups are a sort of ontological 'link' between individual, empirical, phenomena and an all-embracing metaphysical reality. If reality is one, if it is a 'whole,' then collectives are one way of seeing beyond atomic individual historical entities and events to the true basis of historical reality. Thus to be 'objective' is to recognize a hierarchy of levels of existence in historical objects. At the most superficial level we have empirical historical events; at an intermediate level we have collectives; at the deepest level [which is, as we have seen, the final 'object of historical study'] we have the substance and mechanisms of historical reality itself. This is, of course, the most problematic aspect of mode II historiography, and the aspect which most clearly illustrates the fundamental irreconcilability of mode I and mode II historiography.

Mode II epistemology assigns ontological primacy to a metaphysical basis of our fleeting phenomenal reality. 'Objectivity' -- as the ideal of gaining knowledge of an object of inquiry as it 'really is,' as it exists in and of itself without being colored by subjective factors or distorted through the act of cognition -- is a problem mode II must come to terms with if it is ever to offer any hope for the eventual grasping of the basis of historical reality. Mode I has resolved the major dilemmas surrounding the 'objective' grasping of phenomenal historical facts. It is apparent that mode II could argue that criteria exist for establishing the objective historiographic procedures for investigating collectives: there are legal codifications of institutional entities from families to states; there is the weight of custom through which collectives perceive themselves as such; there are even naturalistic foundations for the identification of such collectives as races and genders. In short, it can be argued (mode I's objections not withstanding) that not only has mode I provided mode II with the criteria for establishing the objectivity of phenomenal historical reality, but that these arguments could be extended -- while retaining at least the form of their original integrity -- to sketch the criteria for objective study of historical collectives. However, how does one begin to establish criteria of objectivity in the investigation of a metaphysical entity? Mode II has not successfully established such criteria. It does, however, endorse a method which it is supposed will yield a knowledge of such reality.

We recall that empirical historical facts provide 'clues' to an underlying historical reality and the study of such clues will yield 'patterns' in history. These patterns are themselves part of a larger, all-encompassing, web which is the orderly unfolding of historical reality itself. Thus it is hoped that complete immersion in empirical historical details will result in a sort of (perhaps) intuitive cognitive grasp of the underlying -- to use Kahler's term -- "coherence" of history. This is in essence the approach of historians such as Isaiah Berlin (who, we must emphasize, would disassociate himself from the mode II perspective as completely as he would from mode I). In the end, through complete immersion in the phenomenal details of history, the historian must "distinguish, without benefit of rules, what is central, permanent, or universal from what is local, or peripheral, or transient."[74] There are no 'rules' in the course of this journey, but then not even a Plato could offer a blueprint to guarantee that one could attain the insights of a philosopher-king. Berlin continues his advice and although he is, again, not a spokesman for mode II, his words give us a flavour of the qualities and credentials historians must possess if they are to be 'objective.' He advises that historians need

> a capacity for integration, for perceiving qualitative similarities and differences, a sense of the unique fashion in which various factors combine in the particular concrete situation, which must at once be neither so unlike any other situation as to constitute a total break with the continuous flow of human

> experience, nor yet so stylized and uniform as to be the obvious creature of theory and not of flesh and blood. The capacities needed are rather those of association than of dissociation, of perceiving the relation of parts to wholes, of particular sounds or colours to the many possible tunes or pictures into which they might enter, of the links that connect individuals savoured as individuals, and not primarily as instances of types or laws.[75]

Berlin's advice offers us a nice insight into that delicate balance between the individual historical fact and the significance of that fact within a broader historical reality. The full import of that balance between the specific and the general [or, in the perspective of mode II, the phenomenal and the metaphysical] we shall shortly turn to in discussing the notion of historical 'explanation.'

The perhaps disconcerting vagueness of the preceeding discussion on historical objectivity was completely avoided by mode I. There, a distinct subject-object dichotomy was possible because phenomenal reality provided a stopping-point for all inquiry. In mode II, however, there is no possibility of dividing the universe into atomic entities which can be 'checked' against each other. In mode II the focus is a wholistic universe, one in which firm object-object and subject-object dichotomies are simply not possible. 'Objectivity' à la mode I is not possible when we recognize that human consciousness is itself a part of the evolution of reality. This evolution is dialectical and "in the process of history subject and object interpenetrate each other, thereby effecting that unique development in which the subject, i.e. human comprehension, gradually becomes an objective fact, namely human consciousness."[76]

The influence of Hegel is clear in Kahler's statement above, as it is when Collingwood asserts:

> The peculiarity of an historical or spiritual process is that since the mind is that which knows itself, the historical process which is the life of the mind is a self-knowing process: a process which understands itself, criticizes itself, values itself, and so forth.[77]

The emphasis above is upon the creative nature of the historical process. It is Hegel's achievement to recognize a dialectical progression through history of metaphysical reality and its interpenetration with phenomenal manifestations. Human consciousness itself being one such manifestation, the historian is himself an inextricable part of the process of history. Thus historical 'objectivity' is the objectivity found in the realization that

> the past is not a dead past but lives on in the present, the historian's knowledge . . . is not either knowledge of the past and therefore not knowledge of the present, or else knowledge of the present and therefore not knowledge of the past; it is knowledge of the past in the present, the self-knowledge of the historian's own mind as the present revival and reliving of past experience.[78]

That is why, as Collingwood continues, we cannot stand "outside" history.[79] Consequently mode II cannot clearly explicate (i.e. state in 'formal' rules) criteria of objectivity for historical research.

(b) Explanation

Nevertheless, unclear as mode II may be on the topic of what constitutes objectivity, it is very precise indeed on the issue of how to effect an historical explanation.

We saw in mode I that explanations were, in the broad sense, attempts to show how any given "event in question was not 'a matter of chance,' but was to be expected."[80] This notion of "expectation," understood as "rational scientific anticipation,"[81] must not be pressed too far however. In exercising such caution, mode I skirted around the issue of pronouncing any event to be an inevitable occurrence. As we have seen, Popper's great concern was that the notion of "historical inevitability" (to use Berlin's phrase[82]) was not a viable one. And finally mode I, although it was concerned to show that there is 'order' in the world, could not assign any 'significance' to the events in the world.

The crux of mode I's approach lies in its attempts to correlate specific events into specific sequences, and the regularity that specific sequences exhibit then become 'laws.' Two considerations are paramount: we must never confuse separate events or sequences -- they must always be laboriously specified. Furthermore, the exhibited sequences are not themselves causal agents, they are merely mathematical abbreviations which describe the actions of empirical entities. Mode II reverses this order of affairs: we can go beyond specific events and specific sequences to give explanatory accounts for all events and chains of events; the events themselves are less important than 'laws' exhibited because the laws are manifestations of the dynamics of an underlying metaphysical reality. Thus a full historical explanation must go far beyond the historical events themselves. Such events are mere manifestations of a deeper metaphysical historical reality, and the 'meaning' of events -- derived by placing the events into the context of the general pattern of historical development -- becomes the goal of our explanatory account.

Of course "only when the past has a pattern does it have meaning."[83] But the entire emphasis of mode II has been to reveal such a pattern. It is this wholistic unity, evolving dialectically through history, which necessitates that "there is no isolated event."[84] The meaning of contemporary and historical events "must be understood primarily in terms of historical trends that have begun in the past, embrace the present and point to the future."[85] It is such 'trends' which make history, as Eddins notes, "intelligible"; such a quest for intelligibility is to be found only in "speculative" world views:

> The theoretical concern [of 'speculative' theories of history] is with making history intelligible with respect to its general direction and main causal determinants.[86]

Of course such an 'intelligibility' is ontologically based -- it is inherent in reality itself. But it also has a clear psychological dimension. Unlike mode I, which stopped at the formulation of general descriptions of the mechanical interactions of atomic phenomenal entities in the belief that "to find explanation and to discover laws is one and the same thing,"[87] in mode II

> 'Comprehending' is . . . not limited to rational comprehension; it designates something more general, of which rational comprehension is only an advanced stage. Comprehension, as it is used here, is rooted in the stem sense of the word: any encompassing and connecting of a variety of data in a mental act, which reveals some latent connection of these data.[88]

As noted, such insight is difficult to attain and consequently "speculative accounts have generally claimed that there is in historical events a 'significance' or 'meaning' which goes beyond the understanding ordinarily sought by historians."[89] Thus we see how radically the concept of 'historical explanation' differs from mode I to mode II. Because there is an evolving metaphysical basis to historical reality, events can only be understood in reference to this underlying reality -- not merely in relation to each other (as is the case in mode I). Because man himself is part of this larger reality, he is part and parcel of the evolutionary process and historiography must recognize this. As Kahler eloquently summarizes:

> There is no isolated event. Any event is connected with other events, those which brought it about and those which it brings about. Nor does connection of events in itself make a story, let alone history. To form a story, the connection of happenings must have some substratum, or focus, something to which it is related, somebody to whom it happens. This something, or somebody, to which, or whom, a connection of events, relates, is what gives the plain connection of events an actual, specific coherence, what turns it into a story. But such specific coherence is not given of itself, it is given by a perceiving and comprehending mind. It is created as a concept, i.e., as a meaning. Thus, to make even a simple story, three factors are indispensable:

> connection of events, relatedness of this connection to something, or somebody, which gives the events their specific coherence, and finally a comprehending mind which perceives this coherence and creates the concept which means a meaning. . . . there is no history without meaning.[90]

This synthesis of the metaphysical general with the phenomenal specific, and the objective with the subjective, reveals the potency of mode II as a weltanschauung which gives man a clear sense of his place in the universe. This reconciliation of the particular with the cosmic allows mode II to fill the existential vacuum of mode I with a firm sense of the significance of the universe and the meaning of existence. We are part of an historical process encompassing all: man; culture; the world. As Hook states:

> As a culture develops, certain objective needs arise which fulfill themselves through the subjective decisions of men. Men gratify their errant wishes, carry out their urgent duties, pit their intelligence and courage against the obstacles of nature and society -- but all the time they are building something different from what they intend. In the dim light of his understanding, each one weaves a strand in the web of destiny which is the Meaning or Reason of history.[91]

It is the historian's task to kindle that "dim light"; it is our fate, and indeed our duty, to recognize the "web of destiny" and act accordingly. In this perspective, it is obvious that discussion of the 'uses of history' will revel history to have a direct bearing on the conduct of our human affairs.

(iii) Uses of History

(a) Educational

We noted in chapter II that mode I historiography, although it can produce accurate historical knowledge, cannot generate normative lessons from that knowledge. This is necessitated by mode I's rigid positivism which strictly separates knowledge into mutually exclusive categories -- empirical and normative. Thus, as we have noted, "history has no meaning" because "facts as such have no meaning."[92] Mode II, because it finds all historical events pregnant with 'meaning,' suffers from no such inability to draw normative conclusions from the facts of history. As Strayer asserts,

> If history is to be a guide to life it must deal with whole situations, not mere isolated facts; it must deal with causes and effects, not mere chronological sequences.[93]

This is precisely the focus of mode II: because there is a perceived 'wholeness' and 'direction' to evolution man, in the phrases of Eddins, finds his "existential relevance" within a larger historical reality and inquiry into that reality consequently becomes "an inquiry central to the conduct of human affairs":

> We cannot deny that the attempt to assess the 'meaning of human events' is a basic concern of men. Theory of history arises as a response to this pervasive human concern. . . . theory of history may be said to have 'existential relevance,' by which I mean that it is part and parcel of basic human activity, no mere idle or luxurious speculation, but an inquiry central to the conduct of human affairs.[94]

The 'lessons' of history which such an inquiry reveals cover the entire range of human knowledge and experience. As we have seen, the pattern of the past is our guide to present action and an indicator of the shape of the future. Within that pattern we can read the imperatives of our historical moment in the tide of evolution. Mode II agrees with Strayer's dictum

> If formal history is to widen and deepen our own personal experience, if it is to be a guide to action and not an escape from reality, it must make generalizations and draw conclusions.[95]

Mode II sees history as such a "guide to action" because it provides the backdrop against which both the appropriateness and the morality of actions may be judged; it reveals the ontological ground from which we may accurately "draw conclusions." In short, the 'educational uses' of history are boundless. The 'lessons of history' provide us with knowledge of the significance of the present. In the 'meaning of history' we discern the meaning of our own lives. There is, in mode II, a complete amalgamation and blending of the "theoretical" and the "practical." Having already noted the theoretical concern of mode II historians -- especially the effort to make 'meaning' central to 'historical explanation' -- we may continue and emphasize that

> In the second sense, the 'practical,' the concern is with what course of action or attitude is appropriate, 'things being what they are.' The theoretical aspects of theory of history may serve as evidence for the injunctions as to commitments for values, politics, or programs.[96]

And finally, in recognizing the inextricable 'course of history' we recognize ourselves and our society not only as the end product of an identifiable evolutionary process but also the beginning of a continuing development.

(b) Pragmatic/Instrumental Uses

Because we can so see the present as a moment in the unfolding of reality,

> the trend of the whole process, the general direction in which events are moving, and the alternatives they are pointing to for choice and decision, can definitely be seen quite a distance ahead -- in that respect the course of history is predictable.[97]

In claiming to possess such foresight, mode II puts itself far ahead of the limited utilitarian claims of mode I. The adherents of mode II are not cautious "piecemeal engineers"[98] who are always unsure of the extrapolative potential of their data and 'laws.' Mode II, however, does not consider itself less 'scientific' than mode I -- but the definition of 'scientific' changes. In mode II we find that

> great historical forces sweep in majestic sequences that challenge our understanding. Knowledge and mastery of these historical forces, the aim of 'scientific' history and social theory, give man social control and human freedom. Here there is a variant depending upon how the term 'scientific' is interpreted, whether empirically or metaphysically.[99]

Of course mode II defines 'scientific' metaphysically, but such metaphysics does result in the ability to exert "social control" as Hook states. Such social control is conceptualized as bringing society into conformity with the development of history. Just as the lessons of history are all-pervasive, the uses of history extend to all facets of society. In this sense, "freedom" means freedom from acting against the tide of history; it means that we are privy to information which 'liberates' us in the sense of showing us what is necessary to be on the 'leading edge' of evolution. [In this perspective, being 'free' to be 'reactionary' is nonsensical.]

It is therefore evident that the ultimate uses of history are that it not only provides an 'objective' [in the sense of independent of the subjective desires and illusions of individual men] guide to our activities, but that it clearly projects what we may expect of the future. Here history, in the words of Stern, becomes a "collective destiny from which the individual can hardly escape," and consequently history is

> less *past* than *present* history, less the *historia rerum gestarum* than history as *res agenda*, as the whole of the collective forces which act and, while acting, engulf us. . . . history as a perpetual collective development of which each individual is, willy nilly, a part. . . . history is a rapid, turbulant river, flowing from the past through the present, toward the future and dragging us along in spite of ourselves.[100]

The boldest pragmatic claim of mode II is that if we 'know' history we will not find her "dragging us along in spite of ourselves." We are offered the hope of becoming conscious agents in the historical process; the hope that we can confidently attune ourselves and our society to the present moment of evolution and rationally adjust to the inevitably evolving reality.

Footnotes - Chapter III

[1] William H. Dray, Philosophy of History, a vol. in the Prentice-Hall Foundations of Philosophy Series, ed. by Elizabeth and Monroe Beardsley (Englewood Cliffs, N.J.: Prentice-Hall Inc., 1964), p. 1. Dray is, presumably, following C.D. Broad's earlier distinction between critical and speculative philosophy which Nash makes reference to. See Ronald H. Nash, ed., Ideas of History, vol. 1 (N.Y.: E.P. Dutton & Co., Inc., 1969), pp. xiv-xv.

[2] For a concise introduction to both the term 'metahistory' and to the debate surrounding this approach, see Alan Bullock, "The Historian's Purpose: History and Metahistory," History Today, (February, 1951), 5-11, and Christopher Dawson, "The Problem of Metahistory," History Today, (June, 1951), 9-12, who offers a rebuttal to Bullock.

[3] Gustav Bergmann, The Metaphysics of Logical Positivism (N.Y.: Longman's, Green and Co., 1954), p. 1. Also see footnote 5 in our preceeding chapter.

[4] See the introductory comments in chapter 2.

[5] See footnote 19, chapter 1.

[6] Dray, ed., Philosophy of History, p. 61. We do not, however, go so far as to call Hegel's work "the first flowering of speculative philosophy of history" (p. 60). Hegel is a giant, but he stands on the shoulders of a long and strong tradition. The development of that tradition is, however, beyond the scope of this work.

[7] G.W.F. Hegel, The Phenomenology of Mind, trans., with an introduction and notes, by J.B. Baillie. Introduction to the Torchbook ed., by George Lichtheim (Harper Torchbook ed., N.Y.: Harper & Row, 1967). G.W.F. Hegel, Reason in History: A General Introduction to The Philosophy of History, trans. by Robert S. Hartman, a vol. in The Library of Liberal Arts (N.Y.: The Bobbs-Merrill Company, Inc., 1953).

[8] Dagobert D. Runes, ed., Dictionary of Philosophy (Totowa, N.J.: Littlefield, Adams & Co., 1962), p. 196.

[9] Andrew J. Reck, Speculative Philosophy: A Study of Its Nature, Type and Uses (Albuquerque: University of New Mexico Press, 1972), p. 30.

[10] Ibid., p. 30.

[11] See George Novack, An Introduction to the Logic of Marxism (5th ed.: N.Y.: Pathfinder Press, 1969), pp. 20-22 for a straight-forward, very readable, statement of these laws.

[12] Runes, ed., Dictionary of Philosophy, p. 26.

[13] See Novack, Logic of Marxism for an excellent overview of the fundamental antipathy of formal and dialectical logic.

[14] Erich Kahler, The Meaning of History (Meridian edition; N.Y.: The World Publishing Company, 1964), p. 189.

[15] Dray, Philosophy of History, p. 63. Italics in original. Dray is herein initially referring to the observations of Maurice Mandelbaum, as found principally in "Some Neglected Philosophic Problems Regarding History," Journal of Philosophy, XLIX, No. 10 (May 8, 1952), 317-28.

[16] Reinhold Niebuhr, "The Diversity and Unity of History" in Hans Meyerhoff, ed., The Philosophy of History in Our Time (Garden City, N.Y.: Doubleday Anchor Books, Doubleday & Company, Inc., 1959), p. 323.

[17] Carl G. Hempel, "Explanation in Science and in History" in Philosophical Analysis and History, ed. by William H. Dray, a vol. in Sources in Contemporary Philosophy, consulting ed. Frank A. Tillman (N.Y.: Harper and Row, 1966), p. 97.

[18] Karl R. Popper, "What is Dialectic?," Mind 49, N.S. (1940), p. 424.

[19] Novack, Logic of Marxism, p. 84.

[20] F. Engles, "Socialism, Utopian and Scientific" as cited in David McLellan, Marx Before Marxism (Harper Torchbook edition; N.Y.: Harper & Row, 1971), p. 17.

[21] Novack, The Logic of Marxism, p. 70.

[22] Ibid., p. 92.

[23] Ibid., p. 113.

[24] Ibid., pp. 84-85.

[25] Ibid., p. 85.

[26] McLellan, Marx Before Marxism, p. 18.

[27] Karl R. Popper, The Logic of Scientific Discovery (2nd, Harper Torchbook, edition; London: Harper & Row, 1968), p. 15. Italics in original. Also see footnote 43 of our preceeding chapter.

[28] Novack, *The Logic of Marxism*, pp. 125-126.

[29] Frederick Suppe, ed., *The Structure of Scientific Theories* (2nd. ed.; Illinois: Board of Trustees of the University of Illinois, 1977), p. 14. Also see footnote 45 of our preceeding chapter.

[30] B.F. Skinner, *About Behaviorism* (Vintage Books edition; N.Y.: Random House, 1976), p. 202. Also see footnote 49 of our preceeding chapter.

[31] Novack, *The Logic of Marxism*, p. 125. Also see footnote 28 of this chapter.

[32] Sidney Hook, "The Hero in History" in *Ideas of History*, Vol. 2, ed. by Ronald H. Nash (N.Y.: E.P. Dutton, 1969), p. 303.

[33] Kahler, *The Meaning of History*, p. 22.

[34] John Edward Sullivan, *Prophets of the West: An Introduction to the Philosophy of History* (N.Y.: Holt, Rinehart and Winston, Inc., 1970), p. 107.

[35] Hegel, *Phenomenology of Mind*, p. 175.

[36] Novack, *The Logic of Marxism*, pp. 125-126. See also footnote 28 of this chapter.

[37] Dray, *Philosophy of History*, pp. 63-66, *passim*.

[38] Ibid., p. 65.

[39] Pieter Geyl, *Use and Abuse of History* (New Haven: Yale University Press, 1955), pp. 38-39.

[40] D.H. Monroe, *Empiricism and Ethics* (London: Cambridge University Press, 1967), p. 11. Also see footnote 52 of our preceeding chapter.

[41] Paul W. Taylor, "Social Science and Ethical Relativism" in *Ethical Relativism*, ed. by John Ladd (Belmont, California: Wadsworth Publishing Company, Inc., 1973), p. 96. Italics in original. Also see footnote 56 of our preceeding chapter.

[42] A.J. Ayer, ed., *Logical Positivism*, a vol. in *The Library of Philosophical Movements*, general editor Paul Edwards (Glencoe: The Free Press, 1959), p. 22. See also footnote 59 of our preceeding chapter.

[43] C.E.M. Joad, A Critique of Logical Positivism (London: Victor Gollancz Ltd., 1950), p. 111. See also footnote 60 of our preceeding chapter.

[44] Kahler, The Meaning of History, p. 18.

[45] Ibid., p. 40.

[46] Sidney Hook, "The Hero in History," p. 305.

[47] Bertrand Russell, "What I Believe" in Why I Am Not a Christian and Other Essays on Religion and Related Subjects (London: George Allen & Unwin, 1975), p. 52. See also footnote 62 of our preceeding chapter.

[48] Joad, A Critique of Logical Positivism, p. 144. See also footnote 63 of our preceeding chapter.

[49] Bertrand Russell, The Impact of Science on Society (2nd. impression; London: George Allen & Unwin Ltd., 1959), p. 111. See also footnote 71 of our preceeding chapter.

[50] Hook, "The Hero in History," pp. 303-304, passim.

[51] Karl R. Popper, The Open Society and Its Enemies, Vol. 2 (5th, revised, ed.; Princeton University Press, 1971), p. 276. See also footnote 77 of our preceeding chapter.

[52] Ibid., p. 278. See also footnote 80 of our preceeding chapter.

[53] Ibid., p. 278. See also footnote 79 of our preceeding chapter.

[54] Hook, "The Hero in History," p. 302.

[55] Ibid., pp. 302-303.

[56] Milton Friedman, Capitalism and Freedom (Chicago: The University of Chicago Press, 1962), p. 8. See also footnote 84 of our preceeding chapter.

[57] Ibid., p. 16. See also footnote 95 of our preceeding chapter.

[58] If the metaphysical 'pattern' underlying phenomenal reality is static -- as, e.g., in the Platonic system -- there is of course no evolution. Thus dialectics is missing from such perspectives, making them less fully in the mode II pure type.

[59] Such reductionism does not affect the structure or thrust of our analysis. To include a 'regressive' mode II orientation it is necessary to merely reverse our analysis -- i.e. instead of working 'for' the unfolding of history, the imperative would be to work 'against' the regression of man, society and reality.

[60] Reck, Speculative Philosophy, p. 30. See also footnote 10 of this chapter.

[61] Dray, Philosophy of History, p. 64.

[62] F.A. Hayek, "Scientism and the Study of Society" in Modes of Individualism and Collectivism, ed. by John O'Neill (London: Heinemann Educational Books Ltd., 1973), p. 60. See also footnote 103 of our preceeding chapter.

[63] Ibid., p. 60.

[64] Kahler, The Meaning of History, p. 22. See also footnote 33 of this chapter.

[65] See footnote 103 of our preceeding chapter.

[66] Kahler, The Meaning of History, p. 192.

[67] Ibid., p. 42.

[68] Ibid., p. 41. Italics in original.

[69] L.B. Namier, Avenues of History (London: Hamish Hamilton Ltd., 1952), p. 1.

[70] Karl Popper, Conjectures and Refutations: The Growth of Scientific Knowledge (Harper Torchbooks edition; N.Y.: Harper & Row, 1968), p. 23. See also footnote 113 of our preceeding chapter.

[71] Christopher Blake, "Can History Be Objective?" in Theories of History, edited by Patrick Gardner, a vol. in The Free Press Textbooks in Philosophy, general editor Paul Edwards (N.Y.: The Free Press, 1959), p. 311. See also footnote 112 of our preceeding chapter.

[72] Hayek, "Scientism and the Study of Society," pp. 59-60. See also footnote 103 of our preceeding chapter.

[73] Albert Hofstader, "The Philosophy in History" in Philosophy and History: A Symposium, edited by Sidney Hook (N.Y.: New York University Press, 1963), p. 231. See also footnote 120 of our preceeding chapter.

[74] Isaiah Berlin, "The Concept of Scientific History" in Philosophical Analysis and History, edited by William H. Dray, a vol. in Sources in Contemporary Philosophy, consulting editor Frank A. Tillman (N.Y.: Harper & Row, 1966), p. 50.

[75] Ibid., p. 49.

[76] Kahler, The Meaning of History, p. 20. This comment is found in a footnote (#3).

[77] R.G. Collingwood, The Idea of History (London: Oxford University Press, 1946), p. 175.

[78] Ibid., p. 175.

[79] Ibid., p. 176.

[80] Carl G. Hempel, "The Function of General Laws in History" in Gardner, ed., pp. 348-349. Also see footnote 127 of our preceeding chapter.

[81] Ibid., pp. 348-349.

[82] Isaiah Berlin, Historical Inevitability (London: Oxford University Press, 1954).

[83] Joseph R. Strayer (ed.), The Interpretation of History (N.Y.: Peter Smith, 1950), p. 13.

[84] Kahler, The Meaning of History, p. 17.

[85] Hook, "The Hero in History," p. 306. In this citation, Hook is referring only to human action. The principle, however, applies to all historical events.

[86] Berkley B. Eddins, "Speculative Philosophy of History: A Critical Analysis," The Southern Journal of Philosophy, 6 (No. 1, Spring), p. 52.

[87] Gustav Bergmann, "Purpose, Function, Scientific Explanation" in Readings in the Philosophy of the Social Sciences, edited by May Brodbeck (N.Y.: Macmillan Publishing Co., Inc., 1968), p. 219. See also footnote 139 of our preceeding chapter.

[88] Kahler, The Meaning of History, p. 19. This comment is found in a footnote (#2). Italics in original.

[89] Dray, Philosophy of History, p. 60.

[90] Kahler, The Meaning of History, pp. 17-18. Italics in original.

[91] Hook, "The Hero in History," p. 303.

[92] Karl R. Popper, The Open Society and Its Enemies, vol. 2 (5th revised, ed.; Princeton: Princeton University Press, 1971), p. 278. See also footnote 144 of our preceeding chapter.

[93] Strayer, The Interpretation of History, p. 11.

[94] Eddins, "Speculative Philosophy of History: A Critical Analysis," p. 57.

[95] Strayer, The Interpretation of History, p. 14.

[96] Eddins, "Speculative Philosophy of History: A Critical Analysis," p. 52.

[97] Kahler, The Meaning of History, p. 208.

[98] Karl R. Popper, The Poverty of Historicism (London: Routledge & Kegan Paul, 1961), p. 67. See also footnote 157 of our preceeding chapter.

[99] Hook, "The Hero in History," pp. 306-307.

[100] Alfred Stern, Philosophy of History and the Problem of Values (The Hague: Mouton & Co., 1962), p. 12. Italics in original.

CHAPTER IV

THE CHAOTIC STATE OF MODERN HISTORIOGRAPHY

Mode I and mode II, although antithetical orientations, share important characteristics: they are wholly comprehensive weltanschauungen; both articulate sweeping theories which serve as clear blueprints for practice. Both are internally consistent; from philosophical a priori ontological premises to statements on the human ethical dimension, both are recognizable as formally coherent world views. As a result, a clear historiography emerges from each.

The strength of the influence of both orientations upon the philosophy of science in general and historiography in particular has, however, peaked. Modern thought has resisted embracing any one mode fully. Mode II's influence was at its zenith in the early nineteenth century but, as Meyerhoff notes, the entire speculative "tradition, for a variety of reasons, suffered a serious decline in the nineteenth century and a virtual eclipse since."[1] This is not to say, however, that the orientation is without significance today. As Meyerhoff correctly continues: "the current attitude toward this tradition is either (a) that the quest for a meaning [in history] is both useless and hopeless or (b) that the sickness of modern man, caused by the failure to discover such a meaning, can be cured only by a return to theology."[2] We shall momentarily see that there is indeed a revival of a neo-mode II orientation in the form of religious historiographic orientations and the significance of mode II is still being felt, in various shades of subtlety, upon modern historiography.

Mode I's influence is a relatively modern phenomenon. Although its intellectual heritage is certainly as ancient as mode II's -- traceable to the atomic principles of Leucippus and Democritus, continued and reformulated through the sophists and Epicurus, finding a brilliant but short-lived rebirth in Lucretius and a frenzied period of respectability in the Enlightenment -- it was not until well into the nineteenth century that this mode of thought coalesced and achieved full potency. The utilitarians and early positivists were most responsible for this success. Throughout the second half of the nineteenth century what was to evolve into the 'received view' grew in importance as a philosophy of science and then quickly asserted a de facto dominance in the field.[3] A pre-eminence in the philosophy of science was established in a flurry of intellectual activity between the world wars.[4] Ironically, mode I's very success eventually contributed to its downfall. Subjected to intense critical scrutiny from within and without, the claims of mode I proved to be at first questionable then untenable. As Suppe notes, "virtually all the positivistic treatment of science has come under sustained attack since the 1950's."[5] In consequence, "by the end of the [1960's] these [attacks] had been so successful that most philosophers of science had repudiated the Received View."[6]

A decade later, the debris has still not settled. Philosophy of science as a whole can still be said to be in a chaotic state. The philosophy of history, as a component of this larger debate, is certainly not spared the consequences of these debates. Historiography -- because historians, as previously noted, tend to remain aloof from methodological debates -- has often tended to address the issues only superficially. The result is that contemporary historical methodology is divided into camps of historians who have forged their positions through rather indiscriminate borrowing of aspects of both mode I and II. In seeing the limitations of both modes, and in attempting to transcend them by borrowing aspects of the structure and method of both, modern historiographic theory and practice loses what is perhaps the greatest virtue of both modes -- internal consistency. It can be argued that by seeking the 'sensible middle ground' between these extremes of thought, modern historiography has simply borrowed on an ad hoc basis from both. However: to borrow and to combine elements in novel ways is not to effect a synthesis. This does not resolve the problems inherent in both modes, it merely amplifies them; this does not facilitate a resolution of the difficulties between adherents of competing schools, it merely confuses the issues by obscuring the foundations of the differences.

Emphatically, we do not mean to imply that a synthesis of mode I and mode II is not possible. To that point we shall return in the next chapter. At this moment, however, we will overview some major schools of modern historiography to place them into the contextual reference of our two modes of inquiry. Hopefully this in itself will go some way toward resolving the debates between historians -- by at least isolating approximately where each school of history falls on an imaginary continuum between mode I and mode II. We shall conceive of modern schools of history as hybrids of the two modes of inquiry.

NEO-MODE II HISTORY: HISTORICAL SYSTEMS AND RELIGIOUS HISTORY

Two schools of historical thought come quite close to the ideals of the mode II pure type. These schools may be labeled the 'systems' and the 'religious' schools of history.

(i) Historical Systems

We have noted that the clearest manifestations of mode II as a 'pure type' is to be found in the Hegelian world view. Without question, Hegel's articulations of his general philosophical system in The Phenomenology of Mind[7] and his historiography in Reason in History[8] reveal a true exemplar of the mode II perspective. He was preceded and followed by other, but lesser, giants.

Giambattista Vico was perhaps Hegel's boldest historiographic precursor. His ages of gods, heroes and men are the dynamic transformations which men and societies inescapably undergo in the course of history. In The New Science he sought to reconcile particular historical forms with an attempt "to describe at the same time an ideal eternal history traversed in time by the history of every nation in its rise, progress, maturity, decline and fall."[9]

Oswald Spengler asks, in his classic The Decline of the West,

> Is there a logic of history? Is there, beyond all the casual and incalculable elements of the separate events, something that we may call a metaphysical structure of historic humanity, something that is essentially independent of the outward forms -- social, spiritual and political -- which we see so clearly? Are not these actualities indeed secondary or derived from that something? Does world-history present to the seeing eye certain grand traits, again and again, with sufficient constancy to justify certain conclusions?[10]

He answered himself in the affirmative, and produced an analysis of human history remarkably compatible with the mode II pure type. Conceiving of history as the medium in which civilizations -- anthropomorphized into living organisms -- pass through life cycles comprised of four distinct states, he painted a picture of universal, organic, history. As in Vico and Hegel, the dynamics of the transformations are an inherent part of the trans-historical organism and external, phenomenal, reality merely reflects the workings of the ontological substratum.[11]

Although a sociologist, Pitirim Sorokin discerned a complex, dynamic, and multifaceted "rhythm" in history as profound in its historiographic consequences as in its sociological implications. Perceiving history as the interaction of a multitude of dynamic, organic, "systems," he sees a "rhythm" of their interaction and development in history. Building level of abstraction upon level of abstraction he culminates his integrated, wholistic, view of history as a constant series of transformations by subsuming the varieties of cultural and social systems within a "superrhythm" of three (ideational, idealistic and sensational) "supersystems."[12]

Always complex, often convoluted, Sorokin's schema seeks to embrace all of reality within a coherent, dynamic, whole. The effect of his thought on the philosophy of social science echoed (and in consequence indirectly revived) the pervasive influence of Hegel.

Perhaps the most modern figure (although a contemporary of Sorokin[13]) who may realistically be considered an exemplar of mode II is Arnold Toynbee. Starting his mammoth A Study of History with the premise "in order to understand the parts we must first focus our attention upon the whole, because this whole is the field of study that is intelligible in itself,"[14] he discovered in history a universal pattern of ascent, decline and disintegration of "civilizations." The importance of Toynbee's work is difficult to overstate.

First, the appearance of A Study of History over the years 1934-1954 reveals the continuing vitality of the neo-Hegelian, speculative, philosophy of history. True, Toynbee has his detractors, but he also has his defenders. At the very least the spirit of debate his work generated amply illustrates that the neo-mode II orientation is still a potent force in the philosophy of history and historiography.

Second, the sheer empirical weight of the data Toynbee amassed is overwhelming. If Hegel has earned history's respect as the foremost articulator of the theoretical tenets of the speculative tradition, Toynbee surely deserves recognition for the most impressive defense of the speculative tradition through the use of historical data. As Gardner witnesses:

> A Study of History is the product of a learning and erudition which make previous attempts to present a systematic picture of human history look rather thin and sketchy; it has been inspired by a vision of imaginative power and range; and the author exhibits throughout a considerable capacity for synthesizing historical material, and for inventing fresh frameworks of classification and interpretations.[15]

Finally, Toynbee illustrates the modifications mode II has undergone and the form in which it survives today. As Meyerhoff noted, at the beginning of this chapter, "the sickness of modern man, caused by the failure to discover ... a meaning [in history] can be cured only by a return to theology."[16] Toynbee, in agreement, states in Civilization on Trial:

> While civilizations rise and fall and, in falling, give rise to others, some purposeful enterprise, higher than theirs, may all the time be making headway, and, in a divine plan, the learning that comes through the suffering caused by the failures of civilizations may be the sovereign means of progress.[17]

Thus mode II is with us today -- albeit in modified form -- in the guise of 'religious history.' To this historiographic orientation we shall turn momentarily. But first we must again emphasize that neither the historians nor the schools of thought discussed under 'historical systems' and 'religious history' are intended to be fully representative of mode II. Mode II is a 'pure type' -- a formal construct against which actual historiographies may be measured and, in consequence, better understood. In discussing the historians grouped under 'historical systems,' for example, only Hegel can make any claim to be almost wholly within the mode II pure type. Nevertheless the others -- at the very least because they deal in qualitative transformations, because they are fully in support of a dynamic view of historical progression, because they view history wholistically and organically, and because their theories employ metaphysical, causal, deep structures -- are clearly in alliance with mode II. That they may not be dialectical, that they disagree over whether historical progressions are cyclical, linear or 'spiraling,' and that they utilize different units for their historical analyses must not obscure a basic affinity with the mode II pure type. On the aforementioned "imaginary continuum between mode I and mode II," they clearly fall very close to the mode II pure type. In so 'placing' some of the main modern historiographic orientations [see figure 2] it is hoped that the similarities and differences between schools of history can be understood in reference to what may be termed the two 'metaparadigms' of mode I and mode II.

Even without touching upon the point of a resolution to the debates between these schools through affecting a dialectical synthesis of modes I and II (our objective in chapter five), we may at least recognize the reasons behind the debates. Our initial assertion that "history is at a preparadigmatic stage"[18] is directly linked to the fact that historical methodologists have been hesitant to try to isolate the dominant competing paradigms in the philosophy and method of history -- with the objective of isolating the fundamental, and antagonistic, ultimate points of reference for such paradigmatic debates. Our 'modes of inquiry' are precisely such a preliminary attempt.

(ii) Religious History

Although farther removed from the mode II pure type, religious history is nevertheless the major form in which at least some of the tenets of mode II exist. From Augustine to Niebuhr, religious historians have been the primary opponents of the mode I historical world view. Religious historians have, and always had, the illumination of a metaphysical substructure -- behind, and directing, 'mere' phenomenal events throughout history -- as their objective. This has been their historiographic ideal at least since Augustine. As Jacques Maritain, himself a modern exponent of this school, notes in explicitly acknowledging his historiographic mentor:

> [Augustine's] City of God attempts to bring out the intelligible and, so to speak, trans-historical meaning of history, the intelligible meaning of the sequence or development of events in time. This is precisely the general object of the philosophy of history.[19]

The Christian historiographic tradition, blossoming in Augustine's City of God, complements the mode II ideal of embracing all times and all places within the framework of one, wholistic, organic reality. Long before, and after, Hegel

> Christianity professed a universalism which knew no national boundaries and no class distinctions. It has been remarked that this universalism of Christianity implied a vision

> of history based on spiritual and moral values which were not the exclusive property of this or that people or nation, but were common to all mankind; . . . Christianity introduced the notion of universal history.[20]

A remarkable continuity and integrity marks the development of Christian historiography. This line of continuity leads directly back to Augustine. As La Pina notes,

> The historical pattern elaborated by Augustine became the model for Christian historiography of medieval and modern times, and from it a large section of contemporary Christian historical works still take their inspiration.[21]

A recent classic and timely restatement of the position was undertaken by Kenneth Latourette in his 1948 Presidential Address to the American Historical Association.[22] Latourette's address was timely because it began with a reminder for his colleagues of the methodological problems which were fragmenting their discipline -- questions of selection and objectivity; the utility and limits of empirical methods; issues such as causality and determinism; the nature of historical interpretation; etc.[23] His address is significant because he chose to offer the following proposal as a resolution to historiography's dilemma:

> May I make bold under these circumstances to invite your consideration to one of the oldest interpretations of history, the one which bears the name Christian?[24]

The questions asked were the same ones mode II historiography holds dearest:

> Do patterns exist in history? All historians make selections from the multitude of happenings which constitute the quarry in which they work. Do they do so arbitrarily or in accord with what

> is inherent in the events? If there are patterns, can they be discerned? Is history governed by laws? If so, what are they? Does history have meaning, or is it simply sound and fury, signifying nothing? Does it have an end toward which it is moving, or is it movement without discretion?[25]

Articulate exponents of Christian historiography responded to offer unequivocal answers: Niebuhr defends the proposition that "Christianity embodies the whole of history in its universe of meaning because it is a religion of revelation which knows by faith of some events in history, in which the transcendant source and end of the whole panorama of history is disclosed."[26] Maritain is certain that "Christianity has taught us that history has a direction, that it works in a determined direction."[27]

Modern Christian historiography and philosophy of history has matured into a sophisticated blending of Hegelianism, evolutionary theory and religion. What has been termed de Chardin's "Christian evolutionism" skillfully integrates science, philosophy and religion[28] into a historiography which tries to reconcile the roles of God and matter within a clear line of dynamic historical transformations leading from mankind's prehistory to its final destiny. Karl Lowith feels the time is ripe for a synthesis of preceding historiographic traditions:

> The Greek historians wrote pragmatic history centered around a great political event; the Church Fathers developed from Hebrew prophecy and Christian eschatology a theology of history focused on the supra-historical events of creation, incarnation, and consummation; the moderns elaborate a philosophy of history secularizing theological principles and applying them to an ever increasing number of empirical facts. It seems as if the two great conceptions

> of antiquity and Christianity, cyclic motion and eschatological direction, have exhausted the basic approaches to the understanding of history. Even the most recent attempts at an interpretation of history are nothing else but variations of these two principles or a mixture of both of them.[29]

A resolution is to be found in the recognition that history "is meaningful only by indicating some transcendant purpose behind the actual facts. But, since history is a movement in time, the purpose is a goal. Single events as such are not meaningful, nor is a mere succession of events. To venture a statement about the meaning of historical events is possible only when their *telos* becomes apparent."[30] And the spirit of Hegel is far from spent as the works of Erich Kahler evidence. Viewing history as "an ever widening process of interaction between conscious comprehension and material reality,"[31] he asserts:

> When we survey the course of history, indeed of evolution, we cannot fail to notice the *gradual expansion of existential scope*, and certain events (often covering extended periods) which constitute caesuras, or turning points because their *center of gravity of existence shifts from one level to another level*, from a lower level with narrower scope to a higher level with wider scope. Such a caesura was for instance the evolutional transition from the animal to the human being.
>
> The course of history shows a consecution of such shifts of existential points of gravity, of such degrees of existential and implicitly intellectual expansion of scope.[32]

This progression is far from random, having a very specific "direction,"[33] pointing toward the ideal of an ultimate "organized, supra-national world order."[34]

Such are the forms in which the mode II historiographic orientation continues to influence modern historiography. These philosophies and methods of history stand in polar opposition to the historiographies closer to the model of mode I.

NEO-MODE I HISTORY: QUANTITATIVE HISTORY AND 'NEW' ECONOMIC HISTORY

Unlike the case of neo-mode II schools of historiography, a concerted effort to incorporate the mode I perspective into historiographic practice did not mature until very recently. True, we did have the Rankean school, but its efforts were directed mainly toward the technical problems of verification of historical sources. Ranke's obsession with 'facts' is 'scientific' in only the narrowest sense of the term. As Benson observes:

> As is well known, modern historical method was founded in Germany during the early nineteenth century. Trained in philology, Barthold Niebuhr, Leopold von Ranke, and others then brilliantly applied that discipline's critical method to ancient, medieval, and early modern documents. As a result, 'scientific history' came into being -- a term that primarily meant the critical study of primary sources, not science in Nagel's sense. Essentially, the rules laid down by the discipline focused attention upon the authentication of documents and the evaluation of testimony that credibly could be extracted from different kinds of authentic documents.[35]

Such emphasis upon validation of sources led to what Carr terms "dry-as-dust" histories. He condemns

> . . . the nineteenth century heresy that history consists of the compilation of a maximum number of irrefutable and objective facts. . . . It is this heresy which during the past hundred years

> has had such devastating effects on the modern historian, producing in Germany, in Great Britain, and in the United States, a vast and growing mass of dry-as-dust factual histories, of minutely specialized monographs of would-be historians knowing more and more about less and less, sunk without trace in an ocean of facts.[36]

As we have seen in chapter two, the production of such 'specialized monographs' is precisely the "encyclopedism" which Mandelbaum praised as an "unmitigated objectivity."[37] However the establishment of data, as we have also shown, is far from the entirety of mode I's objective. Never-the-less these initial attempts at 'scientific history' were an impetus, setting into motion a long chain of influences. As Meyerhoff recognizes, "the training of a new generation of 'scientific' historians, in the image of their great teachers -- Niebuhr, Ranke, Droysen, or Mommsen in Germany, Taine and Fustel de Coulange in France, Lord Acton and Bury in England -- nourished the hope that history would, at last, take its place as an equal partner in the universe of science."[38]

The fruition of that hope was long in coming. It was not until well into the twentieth century that a full (or at least more full) development of mode I historiography came into actual historiographic practice. Today, the tenets of mode I historiography guide the methodology of two schools of history: 'quantitative history' and the 'new economic history.'

(i) Quantitative History

Recent reliance upon quantification techniques is a result of historians recognizing, first, that they do indeed make generalizations in their writings, second, that these generalizations can carry more conviction if statistically documented beyond reasonable doubt. The persuasive power of tabulated statistical data has increasingly become employed by historians and consequences have, at times, been profound. To illuminate this crucial point, we cite William O. Aydelotte at length:

> Applications of quantitative techniques to historical materials have, in some cases, materially advanced the discussion of major problems. Monographs on the composition of the British House of Commons, which are now fairly numerous and cover a span of six centuries, have brought to light significant continuities and changes in the social structure of the British political elite. Crane Brinton, in his well-known quantitative study of the members of the Jacobin Clubs, reached the conclusion that the Jacobins represented 'a complete cross-section of their community' and that: 'The Jacobins of 1794 were not a class, and their enemies the "aristocrats" were not a class; the Terror was not chiefly then a phase of the class-struggle, but even more a civil war, a religious war.' Donald Greer, on the basis of a quantitative analysis of the victims of the Terror, argued that the lower classes, by the definitions he used, supplied 70 per cent of the victims and the upper classes less than 30 per cent and that: 'The split in society was perpendicular, not horizontal. The Terror was an intra-class, not an inter-class, war.' From the researches of Brinton, Greer, and others, crude class theories about the French Revolution have received a setback. Revisions have also been made in accepted views about American history. Richard P. McCormick published in the American Historical Review a set of tables, drawn from readily available election statistics, on the basis of which he was able to

> show that the great popular turnout of 1824 was a myth and that: 'In the 1824 election not a single one of the eighteen states in which the electors were chosen by popular vote attained the percentage of voter participation that had been reached before 1824.' His finding contradicts the assertion he quotes from a standard text that, in the period before 1824, 'only small numbers of citizens seem to have bothered to go to the polls.' It contrasts also with Charles and Mary Beard's colorful statement that, by 1824, 'the roaring flood of the new democracy was now foaming perilously near the crest . . .' and with Arthur M. Schlesinger, Jr.'s reference to the 'immense popular vote' received by Jackson in 1824. Albert Ludwig Kohlmeier, using statistical data on canal and riverboat traffic, was able to show when and how rapidly the trade of the Old Northwest shifted away from the South and to the Northeast. Stephan Thernstorm, by a quantitative analysis based largely on census records, exploded various familiar hypotheses about social mobility in a Massachusetts town in the later nineteenth century. Quantitative presentations have formed the basis for substantial generalizations by an impressive group of additional historians including Thomas B. Alexander, Bernard and Lotte Bailyn, Allan G. Bogue, Jean Delumeau, Robert W. Fogel, Frank L. Owsley, Lawrence Stone, Charles Tilly, Sylvia L. Thrupp, and Sam B. Warner, Jr. This list of examples could be considerably extended.[39]

Aydelotte's comments are instructive in that they force a recognition of the fact that "generalizations are implicitly quantitative in character, even though this may not always be clearly brought out." As Lee Benson says, "historians who use words like 'typical,' 'representative,' 'significant,' 'widespread,' 'growing,' or 'intense' are making quantitative statements whether or not they present figures to justify their assertions."[40] Failure to acknowledge this inherently quantitative dimension of generalizations is to risk, as Aydelotte documents, nothing short of professional embarrassment.

The Beards' above cited "colorful statement that, by 1824, 'the roaring flood of the new democracy was now foaming perilously near the crest'" and "Arthur M. Schlesinger, Jr.'s reference to the 'immense popular vote' received by Jackson in 1824" seem at best incorrect, at worst mere invention, and in all probability myth posing as history after the cold data presented by McCormick. The discomfiting, if McCormick is indeed correct, is all the more acute in that Aydelotte notes that McCormick merely utilized "readily available election statistics." It is precisely to avoid such folly that G. Kitson Clark warned: "do not guess, try to count, and if you cannot count admit that you are guessing."[41] The consequences of ignoring this advice are so professionally perilous that quantification has recently become an integral part of modern historiography. This trend achieved maturity in both legitimacy and method in the early 1960's.[42]

Once accepted as a legitimate historical method, quantification quickly gave rise to significant questions about how 'scientific' historiography could and should be. Recent literature illustrates just how rapidly the debate escalated.

In 1966 Aydelotte could, in common-sense terms, state modestly and concisely that "the principle value of quantification for the study of history, stated in simplest terms, is that it provides a means of verifying general statements."[43] The value of the method was that "a quantitative analysis offers a systematic means of testing hypotheses. It establishes how many examples there are to support each side of the argument and thus reveals not only the main features of the evidence but also, more important, the exceptions to them, the nuances, the degree to which the emerging generalizations need to be qualified."[44] Thus quantification methods were perceived as tools which could assist the historian in understanding the past, but these tools were auxiliary to issues and methods central to the theory and practice of history.

In contrast to this placid level of discussion by 1973, less than a decade later, an International Colloquium at the Institute of History of the Polish Academy of Sciences (Warsaw, November 13-16, 1973) dealt with quantification issues which touched upon the very essence of historiography. Reporting on the colloquium, Stefania Kowalska-Glickman heralds that "quantification in historical research does not consist only in the perfection of the historian's 'toolbox.' . . . In the search for the truth -- the fundamental and prima rationale of historical study -- quantitative methods introduce several new factors."[45] Various seminars and presentations dealt with an astounding range of critical issues: shifts in historical writing from traditional narratives to histories which pose selective historical questions; the nature and function of theoretical models; problems in model application; the uses of mathematics in the search for laws inherent in social processes; the dynamics of long-term socio-economic changes; the role of computers; validation techniques; relationships between population, property and social structures.[46] Such basic methodological concerns, generated by the new fascination with quantitative techniques, are a far cry from Aydelotte's restrained comments of 1966;

> Historians do not ordinarily need to deal with problems of statistical inference in which an attempt is made to ascertain the characteristics of a large population by inspection of relatively small samples. Their work is usually limited to the easier task of descriptive statistics in which the object is to portray the characteristics of a group, all members of which have been studied, and to correlate some of these characteristics with each other. The computations needed for this are not ambitious. All that is generally required are a few totals, a few percentages, and a few correlations in which the relationship between certain variables is examined while other variables are controlled. This is a simple matter mathematically, although the research may be laborious, and it is simple mechanically as well. Even so modest a use of quantitative methods can sometimes produce results of great interest and can be used to test historical generalizations of some scope on which there has heretofore been scholarly disagreement. Since only a limited amount of such research has been done, much gold is still near the surface. It may turn out, however, that richer veins lie deeper. Though it has proved extremely useful to classify, arrange, and summarize the available information, it may be even more rewarding -- to judge from some of the ventures that have already been made -- to attempt more complex methods of descriptive statistical analysis by the use, for example, of mathematical models or of scaling techniques.[47]

'Richer veins' have indeed been struck. Even without mention of economic history (to which we shall turn momentarily) modern historians have made remarkable use of quantification techniques to further such specializations as workers' history, urban history and, above all, historical demography. However, as Kowalska-Glickman has noted, much more than a mere improvement in the 'historian's toolbox' has been effected. The merging of history and quantification has resulted in a fundamental reappraisal of the very nature of historical inquiry. That reappraisal is opening the possibility of a truly 'scientific' history à la mode I.

We have already noted the increasing emphasis upon quantifiable entities in historical investigation. This emphasis is not an end in itself, but a response to the realization that empirical data can resolve disputes. Thus quantitative techniques provide a method of verifying hypotheses, and such verification overwhelmingly determines the tenability of historical hypotheses. In this manner, empirical historical data serves precisely the same function as data in all scientific investigation. As Mandelbaum has noted, the "generalizations" historians use are not as precise as in science, but they do never-the-less serve a "heuristic function." And "further investigation may prove these generalizations to be correct in a sufficient number of cases so that they can be regarded as offering reasonable hypotheses as to what may be true in further cases, each of which can then be examined in detail."[48] By the middle of the 1970's, the extent to which these tenets of mode I exist in historiographic practice is illustrated when philosopher Mandelbaum is echoed by historian Lampard in his advocation:

> . . . it is only in the degree to which theoretical reasoning is sustained by experience that theory can ever be said to have explained what is observed to have happened. Theories are coherent groups of general propositions used as principles of explanation for a class of phenomena.[49]

We can readily see that all this is in fact a concern with both the testing of 'laws' and the continuing search for ever broader laws -- i.e. 'general laws.' We have now entered far into what is precisely the orientation of mode I. The aforementioned debates on the roles of theory, verification procedures, models, etc., the search for laws inherent in historical phenomena, and the inevitable attendant discussions on the logical requirements of acceptable explanations, all echo the debates of mode I.[50] The most vocal articulator of the need for a subsumption of historiography to mode I methodology is Lee Benson.[51] As Michael Katz (himself a major element in the present vigor of quantitative history) notes, not only does Benson feel that there are "discoverable, general laws about human behavior,"[52] but "as exemplified in Benson's critiques, historical science consists of asking questions about the logic and coherence of arguments, formulating precise and defensible concepts, developing hypotheses and using systematic, primarily quantitative means of discovery and verification."[53]

It is precisely on the issues of 'logic,' 'coherence,' 'precision,' 'defensibility,' 'developing hypotheses,' 'discovery,' and 'verification' that mode I provides the model for quantitative history. As one author of textbooks on quantitative methodology notes, a major advantage of that methodology over traditional qualitative approaches is simply that "the assumptions it uses and the pattern it imposes, are stated and clear."[54] Again, this is exactly what adherents of mode I claim. The most radical swing in the direction of wholly accepting an empirical historiographic methodology has been made by the so-called 'new economic history.' In the field of history, it is the new economic historians who "have succeeded in drawing attention to the need for specification and explicitness in stating the problem and method research. They have aroused interest in measurement, validation, abstraction, and limited hypotheses."[55]

(ii) New Economic History

The vitality of new economic history is testimony to the enduring significance of the mode I world view. As Albert Fishlow notes, the new economic historians' "conviction in the feasibility of scientific economic history manifests nothing else but the same strong endorsement of logical positivism that has pervaded other social science disciplines in recent years."[56] Modern economic historians have, in the deliberate words of E.H. Tuma, nothing less than "the objective of elevating their discipline to a scientific level."[57]

What distinguishes the 'new' economic history from traditional historiography? Briefly:

> Traditional historians have made little use of economic theory, of statistics, or of the method of hypothesis. They have also failed to specify the model and the criteria they use. Consequently, they have often derived vague and broad generalizations which cannot be subjected to testing or confirmation. They have also failed to apply formal and systematic approaches in analyzing the data. Therefore, their results have usually been broad and imprecise. The new economic historians, in contrast, have tended to use models based on the logic of economic theory, though sometimes only by imposing simplifying assumptions to make the theory usable. They also have depended extensively on quantitative data which would allow the application of statistical theory and analysis.

> Should quantitative data be unavailable, new economic historians would try to estimate and generate data, or they might give up the study. Thus, most studies in the new economic history have resulted in fairly precise and verifiable conclusions.[58]

We see that here is an unconditional recognition of theory and quantification as the basis for sound historiographic methodology. These are the twin "pinions" of the new economic history.[59]

The stress on quantification we have already discussed, and there is little [although, perhaps, more sophisticiation is evident] in the quantitative arsenal of the new economic historian that, for example, historical demographers are not aware of. Peter McClelland recalls that 'cliometrics,' a "neologism [which] presumably was meant to signify the marriage of Clio, the muse of history, with that modern deity, Measurement," was coined by economic historians in the mid-1960's.[60] But more than a merging of history with quantitative techniques is involved. As Davis, Hughes and Reiter note, cliometrics involves a merging of "ideas of history, economics, and statistics."[61] Economics provides the needed element of clear theories -- theories which are openly based upon a scientific notion of 'theory.' As Aydelotte notes:

> [Economic history] is naturally suited to quantitative research since many of the original data come in quantified form, the problems and hypotheses tend to assume a quantified shape, and, in the field of economics, theoretical analysis is more advanced.[62]

It is economic theory which provides the crucial 'general laws' which mode I demands as a necessary component of 'scientific' inquiry. Economics is often recognized as the most 'scientific' of the social sciences in large part because it has what Fishlow calls a "considerable number of tested propositions." It is this factor which is critical in the plans of historians to turn their discipline into a 'science.'

> A significant element and clear strength of the new economic history is its explicit and intimate relationship with economic theory. There is available to the economist a considerable number of tested propositions relating cause and effect.[63]

As Fishlow recognizes, to speak of 'tested propositions' -- i.e. laws -- is to speak, echoing Hempel, of cause and effect. The 'strength' of economic theory is not only that it recognizes a 'scientific' notion of laws à la mode I, but that it also offers historians a method of testing, quantitatively, the relative influences of causal factors. As Braybrooke states:

> Whatever their uncertainties, however, economic theory and methods give us the chance of posing relatively precise questions about the past, and even of making quantitative assessments of the relative importance of various causal factors.[64]

Such testing takes the form of 'counterfactual speculation.'[65] The testing of counterfactual speculations is used "to assess the relative importance of different causal factors in terms of their net contributions to the observed change in an economic variable."[66] The object of using such a methodological tool is [Fishlow's qualifier at the end of the following citation notwithstanding] to search for necessary and sufficient conditions of causality. This is identical to mode I's continual search for, and refinement of, general laws.

> This distinction between measuring the effects of actual historical events on the one hand and characterizing a hypothetical and historically unrealized alternative on the other, corresponds to the logical distinction between sufficient and necessary conditions. A is a sufficient antecedent for B if the presence of A always leads to the emergence of B. A is a necessary antecedent for B if the absence of A always means the absence of B. Hypothetical history arises from an interest in establishing how necessary a given historical event was to an outcome.
>
> . . . .
>
> . . . if virtually every time a given set of factors is present they yield the same consequence, that regularity will provide a rigorous basis for defining how the process *in fact* works. It yields a valid set of predictions and retrodictions both. Ultimately our appeal to the requirements of causality is subsidiary to concern for adequate historical description. We want to tell a convincing, and verifiable, story.[67]

Such are the theory and method of quantitative history and the new economic history. Although, in 1974, Conkin was writing that "generalizing scientists, or logicians such as Hempel who learned at their feet" failed to recognize the complexity of man and the impossibility of reducing all knowledge to explanatory forms of physical science[68] and Adelman asserted that historical practice has not borne out Hempel,[69] enormous strides were indeed being made toward the ideal of a 'scientific history.' As is the case with mode II, mode I is indelibly a part of much contemporary historical practice and historiographic theory.

THE MODERN REJECTION OF MACRO-THEORIES

The rigid formalism of mode I and mode II and the methodologies of the schools of history discussed above, resulted in what Meyerhoff aptly describes as the reaction of "romantic historicism." Emphasis on structure over content, form over meaning, caused many -- indeed most -- historians to reject both approaches. As Meyerhoff perceives:

> For whether the historical system was philosophical or scientific, it was a system; and the system, as Kierkegaard argued against Hegel, was static and abstract, the very antithesis of life, movement, and individual existence. Yet the recapture of these 'essences' was precisely the meaning which a romantic historicism had assigned to history.[70]

In other words, it was felt that the application of sweeping macro-explanations for all of the cosmos -- let alone man -- were simply too reductionist. Within such macro-theories man himself was lost and human history became simply the mechanical grinding of a Newtonian clock or the irresistible rolling of a cosmic wheel -- dragging man along. Meyerhoff identifies ten aspects of this rejection of historiographic macro-theory:

> 1. The *subject matter* of history presents a problem. It is so vast and complex that it can hardly be subsumed under a single concept. . . .
>
> 2. The *facts* of history are peculiar, . . . They are individual, concrete, unrepeatable events and entities: . . .
>
> 3. The *primary aim* of a historical narrative is to reconstruct these events in their unique individuality, not to formulate general laws, to bring out the particular differences rather than the common properties of the events included in the historical portrait. . . .

> 4. The language of history is different. . . .
>
> 5. Fact, theory and interpretation form a closely knit complex in a historical narrative. The simple facts of history are not simple at all; . . .
>
> 6. The methods of history are often dubious and suspect. Some, . . . are quite extraordinary -- whether they be called insight, introspection, empathy, imagination, or 'understanding' in Dilthey's sense. Yet these unorthodox methods seem to be quite indispensible; . . .
>
> 7. Explanations in history raise extremely puzzling questions. . . .
>
> 8. Freedom is a special problem for history. . . . What, then are the lines that separate freedom from necessity? And who would dare draw them and claim objective validity for his personal decision?
>
> 9. Values, emotive meanings, and ideological concepts invariably enter into the study of history. They are, in turn, as historicism has shown, subject to change and social climate. . . .
>
> 10. Meaning has receded, or vanished, from history in the sense of the [deterministic] philosophical theories discussed above. Instead of a single theoretical law or a universal rational principle, the modern historian operates with a plurality of laws and principles, the logical status of which is often very obscure. Instead of a coherent, unified pattern of world history, he discloses a great variety of different historical forms and patterns of culture. Instead of a single linear direction, he discovers multiple and incompatible directions in history -- or no direction at all.[71]

Most modern historians are convinced that the above factors make the study of human history an enterprise which cannot be subsumed under the macro-theories of either mode I or mode II. In consequence, the great majority of modern historians and schools of history adhere -- in greater or lesser degrees -- to the principles of historicism. Relying again upon Meyerhoff:

> The basic thesis of historicism is quite simple: the subject matter of history is human life in its totality and multiplicity. It is the historian's aim to portray the bewildering, unsystematic variety of historical forms -- people, nations, cultures, customs, institutions, songs, myths, and thoughts -- in their unique, living expressions and in the process of continuous growth and transformation. . . . Thus the special quality of history does not consist in the statement of general laws or principles, but in the grasp, so far as possible, of the infinite variety of particular historical forms immersed in the passage of time. The meaning of history does not lie hidden in some universal structure, whether deterministic or teleological, but in the multiplicity of individual manifestations at different ages and in different cultures.[72]

The insistence that history cannot be encompassed within macro-systems utilizing general laws was classically formulated by Windelband in 1894. Whereas reliance upon general laws [specifically, those of natural science] was a "nomothetic" approach, history was "ideographic"; science was concerned with universals, history with particulars, with unique events.[73] What ultimately makes each historical event 'unique' is the specific 'meaning' of individual historical circumstances for the actors involved. Historicism, because it recognizes such a subjective value dimension, is the historiographic form of ideographic inquiry. Some of the major schools of history which reflect the modern rejection of macro-theories and accept the principles of historicism are as follows.

(i) Historicist/Relativistic History

That school of history which may be called 'historicist/ relativist' is, in all probability, the largest school of modern historiography and its members among the most influential historians. The philosophical tenets of historicism/relativism are perhaps most lucidly formulated in the works of Peter Winch, R.G. Collingwood and Isaiah Berlin.

Winch's views go beyond the discipline of history to argue that all social events -- historical and contemporary -- are permeated with meaning because all social relations are expressions of ideas about reality.[74] He argues that human interaction is 'rule governed,' but rules can only be understood, and made sense of, within the context of a more general social setting.[75]

Winch's ideas are of consequence because he recognizes how truly unique the ideographic perspective insists events are -- unique because they are, for lack of a better term, 'closed' to full comprehension by those not actually in the situation.

> . . . ideas cannot be torn out of their context. . . . the relation between idea and context is an internal one. The idea gets its sense from the role it plays in the system. It is nonsensical to take several systems of ideas, find an element in each which can be expressed in the same verbal form, and then claim to have discovered an idea which is common to all the systems. This would be like observing that both the Aristotelian and Galilean systems of mechanics use a notion of force, and concluding that they therefore make use of the same notion.[76]

From such a perspective, events can only be understood 'from the inside,' so to speak. "'Understanding,' . . . is grasping the point or meaning of what is being done or said. This is a notion far removed from the world of statistics and causal laws: it is closer to the realm of discourse and to the internal relations that link the parts of a realm of discourse. The notion of meaning should be carefully distinguished from that of function."[77]

R.G. Collingwood has contributed much to the acceptance of such a definition of 'understanding' in the realm of historiography. His now famous phrase that history is the "re-enactment of past experience' is meant to be taken literally: the historian must recreate an entire historical event and 'see' it from the viewpoint of the actor(s) involved.[78] His articulation of this tenet is intricate and laborious, but not once does he waver from the principle that what may be termed full 'empathy' [albeit a very complex and specifically defined form of empathy] is the only legitimate method of historical inquiry. This is carried to its logical conclusion: "If we raise the question, of what can there be historical knowledge?, the answer is, of that which can be re-enacted in the historian's mind."[79]

The most detailed modern elucidation of the historicist thesis is found in the highly respected treatises of Isaiah Berlin. In his writings, practicing historical relativists find a full theoretical defense of their historiography.[80] Berlin makes the usual historicists' historiographic critique, dividing inquiry into the camps of 'science' [a term which is used very loosely] and 'art.' The former deals with quantitative categories, focuses on the 'similarities' within its subject matter, concerns itself with general theories, is constantly attempting to build models, and has predictive/retrodictive capabilities.[81] History, however, is 'art.' It is art because when the historian studies an individual, a society, or any other historical entity, he is studying entities which are in some necessary degree unique. Such uniqueness is a result of the 'choices,' the 'freedom,' men exercise. Human beings are "active beings, pursuing ends, shaping their own and others' lives, feeling, reflecting, imagining, creating."[82]

In consequence, any historiographic methodology which tried to reduce human behavior to the formulae of general laws would produce merely the most trivial information -- men die, reproduce, etc. These, the quantifiable aspects of the human condition, at best give us only the barest environmental bounds within which human history occurs.[83] But the real point of historical inquiry is to illuminate the specific person (or institution, nation, etc.), to understand the contingencies of his/her situation, to appreciate how he/she exercised his/her freedom of choice, and to thereby "capture the unique pattern and peculiar characteristics"[84] of the subject of study.

Finally, we may note one last consideration defining history as 'art': the impossibility of a complete subject-object dichotomy in historical inquiry.[85] The historian himself is an existential being, and therefore his/her 'values' must to some degree affect his/her assessment of the motivating values of the subject. The problem is that we all perceive ourselves to be 'rational' in following moral rules and principles, yet these rules can and do differ from person to person, era to era, and consequently we cannot 'objectively' know the normative rules for historical actors.[86]

The above considerations lead Berlin to warn that a historian may at best "apply scientific tests to his conclusions, but this will take him little way."[87] In reality, science can even hinder the historian for "a scientific cast of mind is seldom found together with historical curiosity or historical talent."[88] The triumph of historicism is complete with the crude assertion: "A man who lacks common intelligence can be a physicist of genius, but not even a mediocre historian."[89]

This leads to what may be termed the 'historicist's dilemma.' If all events are unique, yet the historian must get (to use Collingwood's phrases) to the "inside" of these events to "re-enact" them, what precisely are the methods by which one may attain such insight? Are there any methodological rules for this which a historicist/relativist historiography may follow? The answer is negative, and is symptomatic of how historicism -- by rejecting the tenets of mode I and mode II -- is left with a theory of history but no convincing method of historical inquiry. After all is said and done, Berlin can only offer a weak -- indeed naive -- methodological program: as to the problems inherent in perceiving into the meaning of events, historians are merely told that one must "navigate between [the obstacles] as best one can."[90] In order to do so, historians must have special qualities. Berlin feels, in the final analysis, that historians are somehow 'endowed' with the ability to empathize.[91] They must be, because it "can be a mark of genius" to "perceive and describe" the social concepts embodied in history.[92] This 'endowment' of 'genius' is characteristic of one who has 'historical sense,' and it is a 'gift.'[93]

> Capacity for understanding people's characters, knowledge of ways in which they are likely to react to each other, ability to 'enter into' their motives, their principles, the movement of their thoughts and feelings (and this applies no less to the behavior of masses or to the growth of cultures) -- these are the talents that are indispensible to historians, . . .[94]

Also,

> [Historians need] a capacity for integration, for perceiving qualitative similarities and differences, a sense of the unique fashion in which various factors combine in the particular concrete situation, which must at once be neither so unlike any other situation as to constitute a total break with the continuous flow of human experience, nor yet so stylized and uniform as to be the obvious creature of theory and not of flesh and blood. The capacities needed are rather those of association than of disassociation, of perceiving the relation of parts to wholes, of particular sounds or colours to the many tunes or pictures into which they might enter, of the links that connect individuals savoured as individuals, and not primarily as instances of types or laws.[95]

In their urgency to shed what they perceived to be the rigid structural shackles of the system builders -- both 'scientific' and 'philosophical' -- virtually all historicists/relativists settle on a position similar to Berlin's.

The eminent E.H. Carr in his classic What Is History? is sure that "history means interpretation"[96] because, from the plethora of historical facts, the historian selects only certain facts and orders them in a "process by which a mere fact about the past is transformed into a fact of history."[97] Beyond selecting facts, historians must constantly 'interpret' facts. "History means interpretation"[98] because: (i) history is comprised of facts which "are always refracted through the mind of the recorder"; (ii) the historian must "achieve some kind of contact with the mind of those about whom he is writing"; (iii) the historian is bound by the existential conditions of his own era as language and common social perspective make a totally objective historical "neutrality" impossible.[99]

Continuing, Carr feels that: (i) "Society and the individual are inseparable; they are necessary and complimentary to each other, not opposites." (ii) "That elusive entity 'human nature' has varied so much from country to country and from century to century that it is difficult not to regard it as a historical phenomenon shaped by prevailing social conditions and conventions."
(iii) Because "society and the individual are inseparable," we can "arrive at no real understanding either of the past or of the present if we attempt to operate with the concept of an abstract individual standing outside society."[100]

The historiographic consequences are: (i) The body of historical writing is itself conditioned as "the knowledge of the historian is not his exclusive individual possession: men, probably, of many generations and of many different countries have participated in accumulating it." (ii) Historical actors are socially conditioned as "the men whose actions the historian studies . . . acted in the context, and under the impulse of a past society." (iii) Historians are themselves socially conditioned and "you cannot fully understand or appreciate the work of a historian unless you have first grasped the standpoint from which he himself approached it; [furthermore] that standpoint is itself rooted in a social and historical background."[101]

Having made all these stipulations and reservations, how does Carr propose historians go about the business of their profession?

> I shall venture to believe that the historian who is most conscious of his own situation is more capable of transcending it, and more capable of appreciating the essential nature of the differences between his own society and outlook and those of other periods and countries, . . .[102]

To effect such a 'transcendance' the historian, in words echoing Berlin, must have "a capacity to rise above the limited vision of his own situation in society and in history."[103]

Berlin and Carr, however, are decades removed from the more naive relativism of Becker and Beard.[104] To the former pair we cannot casually apply Barraclough's scathing criticism:

> . . . who to-day, would dare to claim that historicism provides an ultimate view of reality, an adequate philosophy either for thinking or for living? 'The more we try to sound the inexhaustible meaning of the particular,' it has been well said, 'the more devoid everything seems to be of any meaning in particular.' That historicism is the progenitor of relativism, is too obvious a fact to require demonstration. Everything is related, judged and evaluated in relation -- and far too often solely in relation -- to time, place, context and environment; there are no absolutes; there is no transcendent sanction for man's action; morality

> itself is atomized, particularized, pulverized, until in the end it is held to be 'impossible to think one man essentially more wicked than another.' The historian is taught to discover, not whether Charles I -- or Hitler -- was right or wrong, but 'how his action was historically conditioned,' to disengage 'the structural features of a conflict which was inherent in the dialectic of events.' If this is truly his function, the only function which the material to his hands permits him to undertake, then we can only conclude that his view of reality is so limited and circumscribed that it sidetracks the very problems which touch us, as individuals, most nearly.[105]

As Berlin states:

> . . . the major fallacy of this position [relativism and subjectivism in history] must by now be too obvious to need pointing out. We are told that we are creatures of nature or environment, or of history, and that this colors our temperament, our judgments, our principles. Every judgment is relative, every evaluation subjective, made what and as it is by the interplay of the factors of its own time and place, individual or collective. But relative to what? Subjective in contrast to what? Involved in some ephemeral pattern as opposed to what conceivable, presumably timeless, independence of such distorting factors? Relative terms . . . need correlatives, or else they turn out to be without meaning themselves, . . .[106]

In seeking an answer to "relative to what," to keep from lapsing into an inescapable solipsism, the modern historicist/relativist falls back upon the touchstone of 'human nature.' Because we are human we possess an 'essence' -- so to speak -- which allows us to ultimately achieve communion with the historical subject. Berlin's aforementioned "common sense" turns out to be far from a common (i.e. 'trivial') thing. It is a recognition that to be human is "to be engaged in a constant fitting of fragment of reality into the single all-embracing pattern that I assume to hold for others besides myself, and which I call reality."[107]

This is the realm of "experiences in general" which gives us "knowledge of life, sense of reality."[108] Applied to history, "historical sense [is] sense of what remains identical or unitary in differences and in change."[109] We are told that all men are "endowed with a nucleus of needs and goals, a nucleus common to all men, which may have a shifting pattern, but one whose limits are determined by the basic need to communicate with other similar beings."[110] This 'common nucleus' is so elusive [having a 'shifting pattern'] that Berlin does not even attempt to describe it, nor will he make clear its 'determined limits.' But he insists that we believe in these "fundamental categories of human experience" which are "logically prior [to the gathering of empirical data and deductive reasoning] and are least subject to change among the elements that constitute our knowledge."[111]

It is the task of the historian to be cognizant of all this and to describe the past in terms of the 'needs and goals' which are not temporal-specific, but actually transcend time. For example:

> We account for the French Revolution or the character of Napoleon or the behavior of Talleyrand as we would account for the behavior of our own contemporaries and events in our own lives, public and private, with the same rich, scarcely analysable mixture of physiological and psychological, economic and biographical, aesthetic and ethical, causal and purposive concepts, which provide what we regard as normal and sufficient answers to our normal questions about how and why things or persons act as they do.[112]

This is precisely the stance practicing historicists/relativists have adopted. As Henri Pirenne [although he does not fully fall into the historicist/relativist camp] elaborates:

> All historical construction -- which amounts to saying all historical narrative -- rests upon a postulate: that of the eternal identity of human nature. One cannot comprehend men's actions at all unless one assumes in the beginning that their physical and moral beings have been at all periods what they are today. Past societies would remain unintelligible to us if the natural needs which they experienced and the psychical forces which stimulated them were qualitatively different from ours. How are the innumerable differences that humanity presents in time and space to be explained if one does not consider them as changing nuances of a reality which is in its essence always and everywhere the same?
>
> The historian assumes, therefore, that he can treat the actions of the dead as he does those of the living who surround him. And this comparison suffices to make comprehensible the subjective element in his accounts.[113]

As we have noted, Berlin asks historians "to distinguish, without benefit of rules, what is central, permanent, or universal from what is local, or peripheral, or transient."[114] Of course, to formulate such rules ~~is~~ to undertake a nightmarish task. First one would have to identify the "central, permanent or universal" aspects of the human condition, then one would have to devise a methodology for uncovering these in the specific historical work. This would bring the historicist/relativist right back to expounding dogmatic 'laws' on the human condition -- and this is precisely the 'systemization' one sought to avoid in the first place.

In final evaluation of the historicist/relativist position, one may apply the succinct and astute observation of Hans Meyerhoff.

Here he is commenting on an essay by Henri Pirenne, but the remarks apply to an entire school of historiography:

> On the one hand it is a plea for the status of history as a science, a summary of the critical apparatus which modern history, in conjunction with its 'auxiliary sciences,' has developed during the last hundred years. On the other hand it repeats the historicist insight that 'to construct history is to narrate it,' not to formulate general laws, that each narrative is a kind of hypothesis or partial explanation, that the search for 'the real meaning' of one's narrative may set limits to the employment of the scientific apparatus, and that the historian cannot but call upon the exercise of the 'creative imagination,' which, in turn, introduces ineradicable subjective differences of personality and milieu.[115]

Such is the dilemma of the entire historicist/relativist school. Meyerhoff is again passing an indictment upon the entire school when he says "[Charles A.] Beard never reached a satisfactory middle ground between his polemics against the pretensions of the scientific method in history and his awareness that some standards of truth and objectivity are necessary in order to be a responsible historian."[116] The seeking of such a 'middle ground' is so complex a task -- and the desire to avoid transforming history into 'science' so great -- that in many instances the historicist/relativist is often driven perilously close to the mode II camp. This irony is a result of the need to overcome Barraclough's aforementioned relativist's dilemma and to open up the avenues by which a historian may gain access to the 'inside' of past events. Certainly Berlin, after eloquently expounding the historicist thesis, is forced to postulate the existence of a timeless, universal, human essence which becomes the gateway to empathy with historical characters. And Namier, who we previously discussed in connection with mode II by stating that that mode carried to extreme his cautious thought [". . . in all intelligent historical quest there is, . . . a discrete, tentative search for the typical and recurrent in the actions of man (even in his unreason), and a search for a morphology of human affairs."[117]] grapples with the question of how to liberate the unique from the general. Let us see the full context of Namier's words -- words important enough in his mind to serve to open his classic Avenues of History:

> The subject matter of history is human affairs, men in action, things which have happened and how they happened; concrete events fixed in time and space, and their groundings in the thoughts and feelings of men -- not things universal and generalized; events as complex and diversified as the men who wrought them, those rational beings whose knowledge is seldom sufficient, whose ideas are but distantly related to reality, and who are never moved by reason alone. Yet in all intelligent historical quest there is, underneath, a discreet, tentative search for the typical and recurrent in the psyche and actions of man (even in his unreason), and a search for a morphology of human affairs, curbed though that search be by the recognition that absent from the life of communities is the integration peculiar to living organisms.[118]

A careful reading of Namier's words shows a profound but ultimately futile attempt to forge a convincing 'middle ground' for historical practice. He opens with the historicist thesis ["the subject matter of history is human affairs"], switches to acknowledging a scientific dimension ["concrete events fixed in time and space"], yet instantly rejects the generalizations of macro-theories ["not things universal and generalized"]. He then pleads a 'complexity' to human history, even an 'irrationality.' Yet beneath this chaos there is a "morphology of human affairs" -- although such a morphology is presumably not reflective of an essence of "things universal and generalized" and therefore we certainly must not treat man as a mass phenomenon because groups of individuals do not possess the "integration peculiar to living organisms." To appreciate the historicist/relativist dilemma, a reading of the whole of Namier's "History"[119] -- the opening chapter of Avenues of History -- cannot be too highly recommended. Throughout, he struggles with the opposites his very introductory words summarily stated:

> While ideas outlive reality, names and words outlast both. The nature and meaning of what they serve to denote or express, change often by wellnigh imperceptible deflection: a gentle, reassuring process which in practice preserves continuity and fosters an illusion of stability; but which is apt to give rise to wrong inferences.[120]
>
> . . . human society is not an organism capable of unconscious growth: at every stage thought and theory intervene, more often impending than promoting re-adjustments imposed in practice.[121]
>
> The study of history -- of human affairs -- has to go deep and remain uncontaminated to be of value; and then the value is not in its factual contents -- 'education is that which remains after one has forgotten all one has learnt.'[122]
>
> 'Does history repeat itself'? Not two events or chains of events are identical any more than two individuals or their lives. Yet the lives of all men can be summed up, as in Anatole France's story, in eight words: 'They were born, they suffered, and they died.' The elimination of individual variants, which tend to cancel out each other where large numbers are involved, is likely to disclose

> certain basic regularities. There may be cycles in history and a rhythm: but if there are, the range of our experience and knowledge is insufficient to establish them; and if there are not, the turn of our minds will still incline us to assume their existence and to invent them. 'Is there anything whereof men say, See, this is new? it hath been already, in the ages before us.'
>
> Man is a repetitive, aping animal; and to basic regularities and individual variations he adds the element of imitation and of expected repetition.[123]
>
> As history deals with concrete events fixed in time and space, narrative is its basic medium -- but guided by analytic selection of what to narrate. The function of the historian is akin to that of the painter and not of the photographic camera: to discover and set forth, to single out and stress that which is of the nature of the thing, and not to reproduce indiscriminately all that meets the eye.[124]
>
> The discussion whether history is an art or a science seems futile: it is like medical diagnosis; a great deal of previous experience and knowledge, and the scientific approach of the trained mind, are required, yet the final conclusions (to be re-examined in the light of evidence) are intuitive: an art.[125]
>
> Unless there is concerted research, history cannot deal with aggregates otherwise than in vague generalizations: to treat them as entities in which each person retains his individuality requires a new technique.[126]

We cannot beg excuse for belaboring the above. Not only does the citing of the thoughts of one of the world's great historians not require apology, but the point illustrated is certainly a profound and controversial one. In seeking to walk the 'sensible middle ground' between mode I and mode II, most modern historians have in fact left themselves without a consistent and defensible historiography. Seeking to avoid what is perceived to be the rigidity, formalism and dogmatism of mode I and mode II, the mainstream modern historians ultimately ask us to believe in -- to borrow Beard's phrase -- "written history as an act of faith."[127]

At first glance this appears almost necessarily so. For it is only in mode I and II that we have witnessed a remarkable consistency -- weltanschauungen in which comprehensive modes of inquiry encompass all thought, including historical thought. Yet the historicist rebels against the accompanying sweeping formalism of such macro-perspectives and pleads for the dignity of human individuality, the freedom of human choice. Mode I offers no such compassion for, to borrow from Skinner, it takes us "beyond freedom and dignity." Neither does mode II allow man or men any special place in the universe: we are all precisely calculable moments in an antithetically evolving cosmos.

The neo-mode I and neo-mode II schools of history have, to greater or lesser degrees, reconciled themselves to such fates. In reward, they too can claim a remarkable consistency, even simplicity, in their theory and practice. In contrast, the historicist rebellion immediately leads to relativism, which in turn is resolved by the positing of a very abstract notion of human essence. The logic becomes tautological; its linkages become strained; the argument becomes ultimately unconvincing. Even the unquestionable brilliance of a Berlin or a Namier cannot make it otherwise. Yet, such is the historiographic orientation of our most pre-eminent historians. Lying mid-way between our antithetical modes, they borrow from both and seek consensus. But consensus is a poor substitute for synthesis. The former merely glosses over real conflict by, to use a political analogy, attempting to foster the illusion of fundamental stability through forming a coalition wherein all voices are heard but none are allowed to dominate. In contrast, synthesis resolves conflict not by seeking to form a compromise by effecting an aggregate of conflicting elements in a 'balance of power,' but by forging a new perspective which subsumes the conflicting elements into a qualitatively new and unique theory. The resultant theory is new because it fully incorporates its antithetical elements; it is unique because it has not only the methodological, explanative and heuristic breadth of its constituent perspectives, but is itself a qualitatively identifiable weltanschauung which opens vistas not perceivable from the standpoint of either of its constituents. As we shall see shortly, there have been attempts even more valiant than that of the historicists/relativists at such a synthesis -- 'social history' and 'sociological history.' However, we will find that we must wait until our analysis of mode III to elucidate the example of a successful synthesis.

Before going on first to social and sociological history, and then to mode III, we shall briefly comment on some of the other, lesser, schools of modern historiography.

(ii) Intellectual History

A historicist/relativist perspective, with its emphasis upon understanding events from the viewpoint of those who were actually in the historical situation, elevates the role of human thought to the center of historical curiosity. Indeed, historicism/relativism and what may be termed 'intellectual history' did flourish together. As Marwick notes: "With Croce, Collingwood believed that 'all history is the history of thought' and in this, of course, he was in key with the new emphasis on intellectual history developing in the twenties and thirties."[128]

The term 'intellectual history' is far from unambiguous, and we are using it in a particular sense -- a sense associated with the historicist/relativist school.[129] Intellectual history, as defined here, is not concerned with the thesis that there are 'eternal ideas' with which the human mind grapples.[130] It is not concerned with the thesis that each age has its own 'spirit' or 'character' or 'Zeitgeist.'[131] Finally, it is not concerned with first isolating and then 'documenting' or 'tracing' the 'evolution' or 'progress' of an idea through history.[132] Intellectual history is, rather, better defined another way. As Felix Gilbert asserts: "It might be more modest to say that the intellectual historian reconstitutes the mind of an individual or of groups at the times when a particular event happened or an advance was achieved."[133] Or, as John Higham states, intellectual history "concentrates on experiences occurring inside men's heads. It centers on man's inner experiences which he has in thinking."[134]

Clearly this is a task fully compatible with the historicist/relativist position, and surely we can agree with Gilbert that "To call this [above] formulation 'modest' is probably an under-statement because this task, if fully done, will lead very far afield."[135] It leads 'far afield' because intellectual history first reinforces and then expands the claims of historicism/relativism. These are the "almost . . . two different conceptions of the discipline" which Higham delineates.[136] The reinforcing (of historicism/relativism) is found in the conception of intellectual history as "an investigation of the connections between thought and deed." Here there is a concern with correlating thought with an "external context of events and behavior." An expansion of the historicist/relativist position is found in the type of intellectual history which "has insisted principally on establishing the internal relationships between what some men write or say and what other men write or say. This kind of intellectual history directs attention away from the context of events in order to systematize the context of ideas. It seeks the connections between thought and thought."[137] This second form of intellectual history pushes historicism to its logical extreme by ignoring everything but the "causal connections between ideas. It depends, therefore, principally on internal analysis."[138]

Together, both of these approaches have the effect of greatly increasing the legitimacy of the historicist/relativist orientation. They serve to propagate the idea that: "In some sense all human activity has a mental component, and intellectual history is displaying increasing usefulness as an integrative tool. This synthetic objective is approachable by studying the causal linkage of ideas with political, social, and economic events."[139]

This is a return to the basic historicist/relativist tenet that the 'human element' places history beyond both the categorizations of philosophic 'systems' and the 'general laws' of science. As Gilbert eloquently concludes:

> Whatever one thinks of the forces that underlie the historical process, they are filtered through the human mind and this determines the tempo and the manner in which they work. It is human consciousness which connects the long-range factors and forces and the individual event and it is at this crucial point of the historical process that the intellectual historian does his work.[140]

Yet the question of how the intellectual historian 'does his work' is not resolved. Precisely the same methodological problems which haunt the historicist/relativist face the intellectual historian. In the final analysis intellectual history lies midway between mode I and mode II -- as does historicism/relativism. And like the latter, it achieves neither a synthesis of the two modes nor does it go much beyond being a negative reaction against the formalism of these two modes. Intellectual history is, too, part of the aforementioned "romantic rebellion."

(iii) Psychohistory and 'New' Psychohistory

A more recent historiographic innovation is 'psychohistory.' There is an obvious and direct link between intellectual history and psychohistory, but there is also a difference -- more properly perhaps a difference of emphasis -- which separates the two. As Gerald Izenberg recognizes:

> In principle, psychoanalytic explanation is no different from any other form of explanation which tries to account for historical events in terms of the motives and intentions of individuals and groups. The difference is that psychoanalysis is a theory of demystification which purports to go beneath the deceptive surface of conscious motives to give the real reasons for behavior -- reasons unknown to the agent.[141]

In so going 'beneath' the [psychohistorians would argue] trivial reasons and motivations accepted by historicists/relativists and intellectual historians psychohistory, from the time of Erikson "whose Young Man Luther can be said to have initiated the contemporary vogue of psychohistory,"[142] has relied upon neo-Freudian psychoanalytic models.[143] The strength of the psychoanalytic model is twofold: not only is the model wholly 'human' in that it focuses directly upon the individual, unique, existential entity, but it also provides historians with a method of comprehending that uniqueness without resorting to the 'intuitive leap' of the historicist/relativist. Psychoanalysis offers a concrete, 'public,' program -- a formal method -- for understanding the historical moment from the 'inside.' As Mazlish, in pleading for the widest possible acceptance of the psychoanalytic historiographic orientation, argues:

> Why should history, the one discipline that deals especially with man's past and seeks explanation of that past largely in terms of men's motives, ignore so staunchly the one science (or, at least, attempt at a science) which centers itself on research into exactly these areas.[144]

However, in so attempting to rescue historicism from its methodological vagueries, psychohistory soon encounters grave difficulties of its own. For example Mazlish, in his well-known and expansive essay "What is Psycho-history?," suggests that psychohistory offers historians the tools to solve one major riddle plaguing the historicist/relativist: how does one grasp that elusive and subtle interaction of objective 'environment' and subjective individual which results in the uniqueness of all historical events?

> Psycho-history in its best moments tries to combine both insights. It attempts to understand the social conditions shaping the development of the individual (and group) psyche, and then the psychological factors forming the social conditions. Linear language forces me to present these as separate operations; in fact, the processes coexist, and correspond, rather than one being the 'cause' of the other. Hence, sociology of knowledge is broadened to include 'psychology of knowledge.'[145]

Yet in spite of Mazlish's disdain of 'linear language,' analysis of psychohistory reveals that this school -- Mazlish's insistence upon a 'coexistence of processes' notwithstanding -- in practice does fall back upon a 'linear' model of causality. As Lifton recognizes, "psychoanalysis stands fast on the principle of historical causation."[146] Precisely where it stands is a function of the psychoanalytic insistence upon an autonomous, ontologically distinct, realm of 'psyche.' This is a legacy of Freud himself. As Reiff states,

> Freud is a monocausalist. His method destroys multiple causation and thus the full truth of manifold understanding. Reducing change to constancy, Freud collapses history into nature, religion and politics into psychology.[147]

In so 'collapsing' the external environment into an internal psychological realm, "Meaning is polarized as inner and outer. All meaning is historical. But inner meaning is the psychological pole; outer meaning is contextual, eventual. The eventual reproduces the psychological. The outer process, deprived of its autonomy, documents the inner."[148]

Freud's problem is inherited by the psychoanalytic school and consequently by psychohistorians. And the problem is fundamental: to set out a comprehensive theory of psyche and then to have that psyche exist within an environment which is fully independent is to allow the existence of countless independent variables which then have to be ignored as affective upon the psyche. If we are willing to have two equal and autonomous realms of significance -- mind and material/social environment -- we will have retreated from the position that meaning is wholly centered in existential man. If we allow an 'objective' environment which mechanically acts upon the psyche then we are back in the realm of science (à la mode I) and the historicist position is undermined because then history does indeed have an 'objective' dimension -- the environment -- which can be isolated and defined. Thus, to preserve the historicist thesis, the 'meaning' of the world beyond the perceiving mind -- "outer meaning" in the words of Rieff -- must indeed be "contextual." This is the environmental context of historical events -- and this "outer process" must "document the inner." To admit anything less is to severely undermine the historicist thesis.

Yet psychohistory, because it cannot live with the essentially naive concept of 'intuitive leap' as a methodological tool nor can it live with the environmentalism of mode I, in the end itself undermines the historicist position and comes extremely close to the mode II orientation in both theory and practice. The swing toward mode II is clear when Lifton describes what he perceives will be the ultimate accomplishment of psychohistory. He says that the germ of this is already present in ERikson's writing, and the "bringing [of] psychoanalysis and history together in a way that does justice to the richness of human experience is at last taking shape." What are "a few of the characteristics which I believe that this psychohistorical development will come to embody"? (i) "It will retain a 'model of time,' but will expand this model into new concepts that combine, and give more subtle expression to, man's individual and collective feelings toward his past and his future." (ii) "It will evolve a genuinely dialectical position concerning the interplay of man's psychobiological nature on the one hand and his historical experience on the other -- . . . ." (iii) "It will retain Freud's principle of the past as motor for historical change, while at the same time taking account of that which is new in the patterns which emerge from the three-way interplay of man's psychobiological nature, his cultural past, and the existing historical currents acting upon him." (iv) "It will similarly stress the dialectic between the reality of external events and man's unique need to perceive these events only through some form of symbolic re-creation." (v) "It will stress man's innate need for exploration and change as a fundamental element in the creation of his history, as well as the countervailing tendency toward stability and stillness expressed in Freud's 'Nirvana principle.'"[149]

All of the above eloquently reinforces the historicist thesis, but simultaneously imposes an 'order,' a 'pattern,' upon the historical course of affairs and men. In short, while psychohistory cannot embrace the mechanism of 'science' it also cannot bear to accept the relativistic implications of historicism. The result: psychohistory swings perilously close to the perspective of mode II -- seeking therein the stability of order coupled with the recognition of both qualitative change and the role of subjective human comprehension in history. Indeed, Lifton immediately continues -- in unmistakenly Hegelian tones --

> In all these ways, the new historical psychology and psychological history -- they may finally come to be brothers -- can gradually free themselves from two intellectual polarities which have all too frequently dominated both historical and psychological work: first, the lingering Newtonian legacy of the closed, mechanistic world of absolute cause-and-effect relationships; and second, the intellectually nihilistic rejection of all general principles or causative elements. It will instead evolve a stress upon patterns and constellations whose cause and effect relationships are the intricate transactions of elements always in process.[150]

Lifton's analysis is correct -- a logical extension of the objectives and method of psychohistory. That extension has been taken to its furthest logical development by Lloyd de Mause and the 'new psychohistory.' There, we have a good reflection of our second mode of inquiry. Lloyd de Mause believes the 'new psychohistory' to be a result of three recent developments:

> The first development was the discovery that the history of childhood followed evolutionary patterns that were lawful, and that this new field of childhood history could form the basis for studying patterns of personality and behavior of both individuals and groups in history. The second factor was the development during the 1960's of psychoanalytic small-group process theory, as formulated by W.R. Bion, Philip Slater, Richard Mann, Graham Gibbard and John Hartman, a new experimental field which began to extend clinical psychoanalytic insight into larger group theory by identifying group fantasies, group defenses, and other shared needs on a strictly empirical basis, while avoiding the holistic reification of 'society' which underlies traditional sociology.
>
> The third factor leading to 'the new psychohistory' has been a new attitude of radical empiricism by a new generation of psychohistorians, trained both in psychoanalysis and in one of the historical disciplines, . . .[151]

Under de Mause, although he would bitterly argue the point, we find psychohistory fusing with neo-Hegelianism. His classic essay "The Evolution of Childhood"[152] clearly illustrates how: history is a progression of 'ages' -- each is qualitatively different and each is a higher and more desirable stage of civilization than the preceding age; there is a dialectical interaction between generations which is the driving force in history yielding qualitative changes between epochs; this dialectical interaction is both spontaneous and independent of social environment; the evolution of civilization is a rationally comprehensible process following laws of development. De Mause has in fact implemented Lifton's ideas for psychohistory.

Thus we see that psychohistory and the 'new psychohistory' built upon the tenet of historicism a historiography which leads back to and parallels mode II. The germ of this tendency was always there.

To conclude by way of review: first, to avoid the historicists' view that a leap of intuition is the only way we can get at the 'meaning' of the past, the psychoanalytic model was employed to provide the methodology for so empathetically peering into the existential soul of past events without resorting to a mechanistic, 'scientific,' model which would reduce the human dimension to quantitative formulations. Thus an autonomous realm of 'psyche' was posited which, ironically, was thought to follow immutable psychological laws which in the end turned out to be just as iron-clad, just as rigid, and just as ahistorical as the general laws of mode I or the systems of mode II. This point is succinctly articulated by Lifton in his comments on an essay by Rieff:

> As Rieff points out, Freud saw the 'remoteness of time' as the 'really decisive factor' in the experience of the unconscious, so that 'a certain event, or events, necessarily in remote rather than near history -- indeed at the beginning -- becomes determinative of all that must follow.' 'Reducing change to constancy, Freud collapses history into nature, religion and politics into psychology.' The difficulty of Freud's method is precisely that of 'originitis': the exaggeratedly causal focus through which, as Rieff puts it, 'History is predestination.' Here are the beginnings of the dictum from which efforts to combine psychoanalysis and history have since suffered, the insistence that there is nothing new under the psychohistorical sun.[153]

Second, the psychoanalytic model had to deal with more than the historical individual if it was to be of value in comprehending historical events. This is clearly recognized by, for example, Bruce Mazlish when he speaks of two "kinds" of psychohistory: "that treating of individuals and that treating of groups." There is urgency to "bridge" the gap between these two forms, and the matter is complicated.

> In life-history, we are primarily concerned with the motives of an individual, suitably psychoanalyzed, of course, and the way in which these personal motives are shaped by the culture and society as well as by his genetic factors, etc. We then seek to understand how the individual interrates with and helps further to shape his surrounding culture and society. In what I shall now call group history, for want of a better term, we are concerned with groups driven or inspired by common motives.[154]

The bridging of the individual with the group resulted in the de facto reification of individual psychology into group psychology and ultimately into the thesis that 'environment' reflects 'mind.' The necessity of this we have discussed, and it is a process which originated with Freud. Freud began to "treat 'peoples' as he did 'the individual' . . . Social movements became macrocosms of individual movements. The dynamic that moves the many is analagous to the dynamic that moves the one."[155] This tendency is most fully explicit in the 'new psychohistory' where we have qualitative psychological 'ages' of 'civilization' clearly reminiscent of Hegel's transformative stages.

Lastly, psychohistory comes even closer to the mode II orientation with the new psychohistory's positing of progressive, qualitative, civilizational transformations. Freud did not have a theory of progress -- rather his was something more akin to a cyclical historical theory leading to an age of gloom and perhaps even doom.[156] Freud was, nevertheless, concerned with the notion of evolution. Mazlish here puts Freud into perspective when he notes

> Whereas Darwin's theories provided man with an explanation of his origin and evolution as a physical animal, Freud, in what I have called his philosophy of history, sought to give man an explanation of his origin and evolution as a cultural animal: . . .[157]

We might add to Mazlish that, whereas Darwin advanced the notion of biological evolution, and Freud introduced psychic evolution, Hegel refined the notion of spiritual evolution and the 'new psychohistory' has built upon Freud to advance a notion of "psychogenetic evolution" which "is not only spontaneous, . . . but also occurs independent of social and technological change."[158]

In the above basic ways psychohistory is a historiographic orientation which fully embraced the tenets of historicism, yet recognized historicism's methodological inadequacies. In attempting to elevate historicism/relativism from its methodological shallowness, psychohistory lapsed into a formalism which parallels mode II. For this reason psychohistory cannot be considered a synthetic resolution to the antipathies of mode I and mode II.

We concluded our discussion on psychohistory on the topic of evolution and progress. Progress is a concept central to the next two schools of history we shall be discussing.

(iv) Whig History

What has been designated 'whig' history has similarities to intellectual history, rejects historicism and relativism, and embraces a notion of progress.

The whig interpretation of history is initially inseparable from the rise of the Whig Party -- with attendant constitutional, parliamentary, and other institutional reforms -- in England. An excellent historical overview of the whig tradition is concisely undertaken by Herbert Butterfield in his little book The Englishman And His History.[159] In eighty-two very readable pages Butterfield traces the whig tradition from seeds dating back to the end of the 16th century, through its formulation in the late 17th century, to its institutionalization in the 18th century and beyond. The development of an attendant whig interpretation of history can be found in Marwick, who focuses upon its formal crystalization in the 19th century. We begin with Macaulay who, "in a limited sense . . . was a 'Whig Historian': to his historical work he brought the bias of a practicing whig politician."[160] Continuing,

> The first Whig historian (in both narrow and broad senses) was Henry Hallam (1777-1859), whose Constitutional History of England from the Accession of Henry VII to the Death of George II was published in 1827, and the tradition was continued throughout the nineteenth century by historians who would have repudiated the overt party bias which attached to Macaulay. All shared with Hallam a spoken or unspoken assumption that the central theme in English history was the development of liberal institutions: thus in the study of remote ages they greatly exaggerated the importance of 'parliaments' or of bodies, real or imagined, that they thought were parliaments; and they tended to interpret all political struggles in terms of the parliamentary situation in Britain in the nineteenth century, in terms that is, of Whig reforms fighting the good fight against Tory defenders of the status quo.[161]

Skipping over the less straight-forward cases of William Stubbs (1825-1901) and his successor to the Oxford Regius chair, Edward Freeman (1823-92),[162] we turn to Trevelyan who was

> very much a part of the 'industry' of history -- a captain of industry one could say -- in that his historical writings suited perfectly the prejudices and beliefs of the upper and middle classes in twentieth-century Britain. Like Macaulay and like Stubbs, Trevelyan was in fact a Whig historian, glorifying English common sense, English toleration, and English liberal institutions.[163]

This tradition dies hard. In 1944 even Butterfield could reverse his 1931 position and write, now that it was certain England had somehow survived the crest of the Nazi onslaught, that "we [English] have actually drawn strength from the continuity of our history. We have been wise, for we have taken care of the processes which serve to knit the past and the present together."[164]

Those 'processes which 'knit the past and the present' are found in the growth of liberal-democratic institutions. In England, this took the form of tracing "the unfolding of certain liberal political ideas throughout the course of the seventeenth, eighteenth and nineteenth centuries."[165] Correspondingly, in the United States, whig historians saw in history "a pure stream of democracy rising with Roger Williams and flowing from him to Thomas Jefferson, to Andrew Jackson, and finally, Franklin Roosevelt."[166] In Canada, historians were able to "draw lines through certain events, some such line as that which leads from Robert Baldwin and L.H. Lafontaine and a long succession of whigs to Canadian independence and bi-cultural nationality . . . [demonstrating] an obvious principle of progress."[167]

Five major concerns trouble the whig approach. First, there is a certain 'inevitability' about the 'progression' described.[168] As Butterfield notes, the whig historian starts with the conviction that "he has discovered a 'root' or an 'anticipation' of the 20th century."[169] From there it is but a matter of the root taking hold and growing: in the words of Gerald Walsh, we are left with "a misleading impression of a smooth and ineluctable onward and upward movement of events which belies the reality [which whig history] purports to describe."[170]

Such a dimension of determinism is a function of the abridgment of history[171] -- of telescoping it into general, transhistorical, themes. Because we have identified the themes in history which are 'important,' we need not concentrate equally on all aspects of the past (as the historicist would favor). We have "a handy rule of thumb by which we can easily discover what was important in the past."[172]

Third, the combination of inevitability and abridgment results in a very linear history. Nuances become lost, attention is focused upon one [at most, a very few] development[s], and abridgment results in a history where "historical development has taken on more the quality of an unbroken linear progression, which moves forward without substantial let or hinderance. . . . the study of the process of change, the tracing of infinitely complex transitions whereby one state of affairs changed into another, is . . . grossly over-simplified."[173]

Fourth, because the development of 'progressive' historical forces is so clear, the whig historian is able to distinguish between historical characters "who furthered progress and the men who tried to hinder it."[174] It is in this moral sense -- the sense in which the whig historian "busies himself with dividing the world into the friends and enemies of progress"[175] -- that "it might be true to say that in Lord Acton, the whig historian reached his highest consciousness."[176]

Finally, there is the over-riding matter of 'presentism.' Obviously whig history studies the past from the perspective of what is important or valued today; it "studies the past with reference to the present."[177] But whig history is only "one variant of presentism in history."[178] Another variant we shall turn to in but a moment.

The above indicates that whig history is closer to the orientation of mode II than that of mode I. Notions of historical 'progress'; the element of the 'inevitability' of such progress; making history ahistorical by making its themes transhistorical; giving criteria for moral judgment: all these facets contribute to a variation on mode II[179] which lacks the element of qualitative historical transformation. Progressive transformations are replaced with linear progression.

(v) New History

Returning to the issue of 'presentism,' we may briefly note the emergence of what is known as the 'new history.' New history may be conceived of as a secularization of whig history. Although whig history does deal with concrete liberal institutions, it does so in an 'idealistic' way -- i.e. the institutions' importance stems from the 'ideas' the institutions embody, and it is those ideas which progress through history: their institutional cloak is secondary. Furthermore, these ideas and their institutional structures progress spontaneously -- they are propelled from within by an autonomous motor. New history grounds these idealistic aspects in Darwinism, but the degree must not be exaggerated: new history remains in essence whig history and is too riddled with idealism.

The new history in America was a reaction against what Marwick calls the "straight-line professionals" -- the orthodox, neo-Rankean, school which was concerned with: (i) dealing "exclusively with constitutional and political matters"; (ii) "the patient accumulation of facts"; (iii) "the study of documents."[180] This narrow specialization even evoked laymen's complaints that such 'scientific' history was virtually unreadable -- the 'dry-as-dust histories' which we earlier noted Carr condemned.

On the other hand, the new and increasingly confident social sciences attacked this 'scientific' history as undeserving of that title as 'scientific' historians did not search for general laws. In reaction to these charges, 'scientific' historians ironically found philosophical and methodological support in Germany.

> A revitalized discussion of historical theory sprang up there [in Germany] in the 1890's. Echoes of it soon reached America, partly through the revisions that Bernheim made after 1900 in his influential Luhrbuch. Heinrich Rickert and Wilhelm Windelband brought forward a sharp distinction between history on the one hand and the natural and social sciences on the other. . . . As in their understanding of Ranke, however, the Americans once again bit only half of the Teutonic apple. The German neo-Kantians were rehabilitating the subjective and qualitative insight by which the historian apprehends values. American historians seized upon the distinction between history and social science with the opposite intention of keeping subjective thought out of their ken. They wanted to vindicate their own scientific respectability.[181]

Thus the 'scientific' ideal was interpreted to mean sticking to 'factual history' -- not to engage in a search for general laws.

But the pressures from the larger social science community continued and were strengthened by the general concern therein with both the utility of social science and the increasing conviction that social science should be an agent of reform -- an agent of implementing 'progressive' social goals and policies.[182] The net result of these pressures was the emergence of the 'new historians' who responded by seeking to broaden the scope of history. "The New History looked outward from institution to context, from structure to environment. It sought explanation of historical change in the 'social forces' (to use one of Turner's favorite phrases) surging behind and beyond the visible form of the body politic."[183]

Frederick Jackson Turner articulated this shift 'from institution to context, from structure to environment' in "The Significance of the Frontier in American History," read at a 1893 meeting of the American Historical Association:

> Behind institutions, behind constitutional forms and modifications, lie the vital forces that call these organs into life and shape them to meet changing conditions.[184]

The positive aspect of the new history was the defining of these 'vital forces.' The negative aspect was twofold: a rejection of the purported 'objectivity' of the neo-Rankean 'straight-line professionals'; and a rejection of the implicit 'whigishness' of their method because of its focus (constitutional and institutional forms). As

> Turner's pupil, Professor Avery Craven, has argued first, that prior to Turner's bold revisions the 'germ' theory of the European origins of American institutions remained unquestioned; and second, that there had been a general neglect of economic, social and geographical factors.[185]

This response was formalized with the appearance of James Robinson's The New History in 1912.[186] In the task of changing and broadening the prevailing historical perspective, Beard and Becker joined in alliance. [Although the new historians were essentially aligned with the emerging relativists, their similarities must not be over-emphasized. What both groups wanted was to 'broaden the base' of history -- "All of the leading American historians in the first quarter of this century were concerned to broaden the base of history, to enrich man's understanding of the richness of his past."[187] This is what allied these 'radicals' in the "sharp controversy between historical conservatives and radicals in the United States. These radicals, who included James Harvey Robinson

(1863-1936), Carl Becker, Charles Beard, and Lynn Thorndike, challenged the basic premises of the ruling 'scientific' school of history: its devotion to 'facts,' its ideal of perfect objectivity, and its enthronement of political history as the leading thread in the historical process."[188]] After these initial and successful attempts to institutionalize the new history, the "most important second-generation product of the new history movement was Arthur M. Schlesinger, Sr. (1888-1965)."[189]

However, in spite of broadening the base of recognized historical forces, the concern with the present and the reformist -- i.e. 'progressive' -- element in the new history forced its revision into a form of whig history. In the end, the new historians' social force became as lawful and progressive as the whigs' developing institutions. This is a function of the new history's quest in discovery of the sorts of social laws that all the new social sciences sought. As Higham et al. note: "if historians were going to be useful in the sense of discovering 'the techniques of progress,' they would need to participate in the search for laws or regularities having some predictive value."[190] Here the new history's ties to progressivism, and the historiographic implications of Dewey's ideas[191] -- with their attendant whigishness -- becomes clear.[192]

Thus the contradictions in the new history become clear. Asking "how can history best reveal the 'technique of progress'?"[193] brings into focus a tension. The tension results from attempting to decide if the 'technique of progress' is to be illuminated

> By joining the social sciences in the positivist program of constructing general laws? Or by deriving criteria of progress in history from the values that are uppermost in the changing present? In effect, the formulators of the New History had recommended both without distinguishing between them; for they considered present-mindedness and science-mindedness as complementary. In time, the two policies seemed less so. As the quest for reliable generalizations grew increasingly urgent, the struggle to absorb scientific uniformities into history became incompatible with the tendency to rely on relative and changing values. In trying to hold the two halves of their faith together, progressive historians stumbled into deepending perplexities and confusions. A movement that began before World War I with the intention of making history more objective ended, in the 1930's and 1940's, in making it more relativistic.[194]

So, in falling prey to problems plaguing scientific history, whig history, and relativism, the new history failed to achieve a synthesis of modes I and II. Yet it did bear the germ of something greater than itself. It did succeed in one of its primary tasks -- 'broadening the base' of subsequent historical inquiry. It gave birth to the age of social history.

> The New History had from the outset pledged itself to a grasp of the past as inclusive of life itself, . . . Clearly delimited research on specific institutions languished; loosely defined studies of situations and relationships abounded. It was an age of social history.[195]

(vi) Social History

Social History is yet another ambitious attempt to come to grips with the fluctuating state of historiographic affairs during the first half of the twentieth century. It too sought a synthesis of the various antithetical elements characterizing the methodological state of the discipline of history.

Some major concerns of social history: first, the pervasive influence of the social sciences upon history had to be digested. Second, the increasing tendency of historians toward specialization raised a need for the articulation of history's common ground. Finally, the 'broadening of the base' of history was a trend which was welcomed and was thought to be an avenue toward the increasing significance and legitimacy of history as a discipline. To achieve these objectives, social history attempted to temper the 'scientism' and 'whigishness' of the new history while simultaneously recasting the 'study of history' as a trans-disciplinary and artistic/ humanistic endeavour.

A major significance of the new history rested in its success in articulating the value of social science methodology for historical inquiry. As Gilbert observes, in the new history we find reflected "the importance that the social sciences were gaining in the United States; by stressing the role of social forces in history, history would be brought into the orbit of the social sciences."[196] The result, as Bullock acknowledges, is that "there is hardly a social science -- anthropology, ethnology, sociology, economics, statistics, demography, social psychology, even psychoanalysis -- which has not been called in aid to open up new lines of inquiry into the past."[197] Social history incorporates all of these social science influences.

In so allying itself with the various forms of social science, social history shows itself to be an ambitious enterprise to lay bare what Fischer metaphorically labels the very "lineaments" of society:

> Today, social history is becoming a sophisticated study of the lineaments of society itself, as they have changed through time. The new economic historians, the new historians of education, the demographic historians, the new diplomatic historians, and the new historians of science are all moving on parallel lines.[198]

The number of species of history falling under the umbrella of 'social history' is indeed great,[199] and trying to fully integrate them rather than allowing them to remain 'parallel' is a troublesome task -- one which we shall address momentarily. However the key to classifying any history as a 'social' history is that it must, as Gilbert noted, 'stress the role of social forces in history.' Such 'forces' are framed in the detached 'scientific' methodological frameworks of the social sciences, and one frequent result is that some social history lapses into the very method which caused historians to reject mode I. [In short, these 'social histories' are in fact precisely those -- 'economic,' 'demographic,' etc. -- which we classified at the beginning of this chapter as 'neo-mode I.' As we shall see, this is not what is meant by 'social history.'] As Gilbert further notes:

> The social historian focuses on movements whose driving force frequently remains anonymous: demographic changes, economic growth, technological advances. . . . The social historian tends to imply that a full analysis of the facts with which he is concerned might 'explain' history and

> even indicate future trends. An extreme expression of this attitude is the view that the course of history is determined by laws which can be discovered. In a more cautious form the same idea can be found in the demand that the historian should concentrate on basic structures or forces of long duration like climate and geography; in relation to them a history of events deals with factors that are ephemeral. The implication is that only social history comes to grips with the basic factors of history; only social history is 'true history.' This claim diminishes the value of all other branches of history and necessarily evokes the opposition of their practitioners.200

That such neo-model generalizing should be rejected by most historians is not surprising. But it is also not surprising that historians should view social history as more than the sum of its parts. That is, social history seeks to 'broaden the base' of history not merely by making more and more disciplines -- economics, demography, etc. -- 'historical'; nor does it seek such a broadening merely by including more subjects -- women, labor, urbanization, industrialization, etc. -- under its rubric. Such disciplinary imperialism does not qualitatively improve history; it merely expands the territory of history.

To effect a qualitative improvement in historical methodology upon an expanded historical 'base,' it is argued that social history must strive above all to be 'integrated' history -- history where Fischer's 'parallel lineaments' are brought together to form a coherent picture; a picture where the lineaments become recognized as components of a larger corpus. Mere proliferation -- in the form of either 'historicizing' more disciplines or extending the list of subject areas -- will not accomplish this. As Bernard Bailyn -- in his introductory comments to his classic study on the historical development of American education within the context of American society -- directly and correctly stated:

> The field of study with which I was concerned, unlike the history of science, law, or Indian-white relations, has not suffered from neglect, which firm direction and energetic research might repair, but from the opposite, from an excess of writing along certain lines and an almost undue clarity of direction. The number of books and articles on the schools and colleges of the colonial period, on methods of teaching, on the curriculum, school books, and teachers is astonishingly large; and since at least the end of the nineteenth century the lines of interpretation and the framework of ideas have been unmistakable. And yet, for all of this, the role of education in American history is obscure. We have almost no historical leverage on the problems of American education. The facts, or at least a great quantity of them, are there, but they lie inert; they form no significant pattern.
>
> What is needed, it seems to me, is not so much a projecting of new studies as a critique of the old and, more important, an attempt to bring the available facts into relation with a general understanding of the course of American development.[201]

To so 'bring the available facts into relation with a general understanding' is precisely the goal of social historians. As Cross echoes, "social history is, above all, integrative, concerned with building towards a global picture of society." In consequence, "almost any aspect of society is fair game for the historian -- class relations, welfare institutions, trade unions, violence, forms of land cultivation, religions, even politics."[202]

However to seek 'integration' while treating 'almost any aspect of society [as] fair game' is a rather large order. In consequence of this simultaneous attempt at synthesis and expansion, the mainstream of what is known as social history has encountered severe problems.

To begin, we can readily appreciate how -- in light of the above -- "the term social history has always been difficult to define."[203] Hobsbawm traces three main and distinct uses of the term in the first half of the century: (i) ". . . the history of the poor or lower classes, and more specifically to the history of the movements of the poor ('social movements')." (ii) ". . . works on a variety of human activities difficult to classify except in such terms as 'manners, customs, everyday life.'" (iii) ". . . 'social' was used in combination with 'economic history.'"[204] Clearly all of these usages are far from sufficiently comprehensive and Hobsbawm rejects them, arguing that the subject matter of social history cannot be so 'isolated':

> Social history can never be another specialization like economic or other hyphenated histories because its subject matter cannot be isolated. We can define certain human activities as economic, at least for analytic purposes, and then study them historically. Though this may be (except for certain definable purposes) artificial or unrealistic, it is not impracticable. In much the same way, though at a lower level of theory, the old kind of intellectual history which isolated written ideas from their human context and traced their filiation from one writer to another is possible, if one wants to do that sort of thing. But the social or societal aspects of man's being cannot be separated from the other aspects of his being, except at the cost of tautology or extreme trivialization. They cannot, for more than a moment, be separated from the ways in which men get their living and their material environment. They cannot, even for a moment, be

> separated from their ideas, since their relations with one another are expressed and formulated in language which implies concepts as soon as they open their mouths. And so on. The intellectual historian may (at his risk) pay no attention to economics, the economic historian to Shakespeare, but the social historian who neglects either will not get far. Conversely, while it is extremely improbable that a monograph on Provencal poetry will be economic history or one on inflation in the sixteenth century intellectual history, both could be treated in a way to make them social history.[205]

This, however, raises more questions than it answers. It begs Perkin's question, the question of precisely what is social history?[206] In working through his attempt to answer his own question, Perkin provides us with an insightful and articulate analysis of the problems inherent in the concept and ideal of social history. In his attempt to resolve such problems and attain that ideal, he provides us with a most instructive illustration of the ultimate methodological inadequacy -- failure to achieve its sought for synthesis -- of social history.

We begin by again emphasizing the vagueness of the term 'social history':

> On social history, then, there seems to be only confusion. . . . For, as the late Sir Lewis Namier remarked, 'human affairs being the subject matter of history, all human pursuits and disciplines in their social aspects enter into it.' What is the field of the social historian? How can we find a place for him?[207]

Seeking to answer Namier's challenge and Perkin's question is no easy task: "For 'social' is an omnibus word covering in the first instance all those human activities which display awareness of others. Semantics fails us: we must fall back on common sense."[208]

Unfortunately, in evoking 'common sense' Perkin, as we shall see, falls upon precisely the same methodological reefs as Isaiah Berlin and the school of historicism/relativism. First, we are warned to steer a prudent course between the formalism of the generalizing sciences and the anarchy of random investigation.

> Social history, then is nothing more and nothing less than the history of society. If this is an Odyssey indeed, it has its wayside hazards. On the one side there is, since nothing human happens outside society, the whirlpool of exhaustiveness, of totality, . . . On the other side prowls the devouring monster of social science.
>
> First, the history of society is not the history of everything that happens in society. . . . The social historian must avoid the attempt to be everywhere at once. . . .
>
> Secondly, social history is not a branch of sociology. It does not seek practical knowledge, descriptive laws, governing principles, predictive generalizations, . . .[209]

Our guide to ensuring we do not drift to either extreme lies in a recognition of the "central theme" which identifies the sorts of questions which are uniquely relevant to the inquiry of social history: "The social historian has his own central theme by which to test the relevance of his questions."[210] Yet Perkin never tells us specifically -- he only vaguely hints -- what that 'central theme' in fact is. He relies upon essentially the same 'leap of faith' as the historicist/relativist when he says -- using Rowse's phrase -- that the social historian

> must 'extract the juices of the social' from agriculture, industry, and trade, the distribution of income and capital, government and public order, legislation and public morality, education

> in all its many forms, religion, intellectual and scientific thought, literature, music, the arts, sports and games, pastimes and amusement.[211]

Perkin admits that his ideal of social history is a "full circle, from cosmology to the meaning and purpose of life *sub specie aeternitatis*," and that such "a study as social history, thus delimited, sounds a superhuman task, . . . But a man's reach should exceed his grasp, or what's a subject for?"[212] The leap of faith is complete when we ask: what are the aids to writing this form of history? "The multiple sensibility of the historian will connect the most diverse sources."[213] And:

> An educated man, it has been said, is one who can read every page of *The Times* or *Guardian* with intelligence; but that does not mean that he needs to be an expert in politics, diplomacy, law, finance, technology, court etiquette, fashion design, literary criticism, advertising, midwifery, marriage guidance, and life insurance, as well as the construction of crossword puzzles. The ideal social historian is the ideally educated man.[214]

If we vaguely define the task of social history as the 'extraction of the juices of the social' and can do no better than stating that the qualifications for being a social historian consist of an 'ideal education,' we have not improved one whit upon the methodological inadequacies of the historicist/relativist. Yet the social historian is loathe to offer further specifications on the nature of social history lest he/she venture too far into the methodological territories of either mode I or mode II. Like the historicists/relativists, social historians seek to salvage the 'human' from the impartial forces of history. The approaches differ, but the result is the same: by naively seeking the 'common sense' of the 'middle ground' social historians have struck an untenable compromise and are left with an essentially inarticuable and ultimately indefensible methodology. This is recognized by the 'sociological historians,' who attempt to overcome the dilemma by more openly embracing the methodologies of the social sciences -- specifically sociology.

(vii) Sociological History

In turning to sociological history we are in fact returning to the methodological perspectives of those preceding schools of history which consciously borrowed from the social sciences. Sociological history is indicative of the great influence that all the social sciences have exerted upon historiography,[215] and it differs from 'social history' in that it consciously appropriates the formal concepts and methods of sociology. As Hofstadter asserts:

> What is basically true today -- and the influence of sociology is much to be thanked for this -- is that the historian now has at his disposal a larger conceptual apparatus and a wider range of methods of work.[216]

The influence of sociology is so pervasive that even Trevor-Roper can proclaim: "Today, I cannot conceive of good history without a sociological dimension."[217] Yet the 'sociological dimension' Trevor-Roper advocates is really that of the social historian, and he is quick to point out what he perceives to be great differences between historical and sociological inquiry.[218] The marriage between sociology and historical study is a long and only partially successful one. As Marwick notes:

> The connection between history and sociology springs from the history of the two disciplines and from their subject matter. . . . Both history and sociology were and are concerned with the study of man in society: the difference, which in the end of course can be a fundamental one, is of approach. In the first instance it was the professionalization of history which moved it apart from sociology, still at the end of the nineteenth century somewhat lacking in established scholarly standards. In the twentieth century it has rather been sociology, more and more sure of itself, and more and more sure that it was history that fell short of the desired precision, which has moved still further away from history. Yet until at least the very recent past there has been a continued and fruitful interaction between the two disciplines.[219]

In consequence, modern historians usually tend to rely upon sociology as a source for auxiliary methodological tools. As Lipset recognizes: "To use concepts and methods developed in sociology or in the other social sciences, . . . does not turn the historian into a systematizing social scientist. Rather, these offer him sets of categories with which to order historical materials and possibly enhance the power of his interpretive or causal explanations."[220] In the end, "many scholars, both historians and sociologists, despair of the value of introducing the methodological approaches of sociology or the other social sciences into historical work."[221]

Nevertheless, history has benefited in concrete ways from sociological methodology,[222] and the thriving of labor history, urban history, history of the family, etc. all obviously owe great debt to the discipline of sociology. The reason for the great use of sociological concepts and methods in current historiography lies with the belief that sociology is a particularly fruitful avenue for resolving the old historiographic problem of reconciling the uniquely 'human' existential/psychological element in history with an 'objective,' independent, environment. Of course psychological history also attempted to reconcile the existential with the external -- but we have seen that environment was, in the end, conceived of as a mere function of the psychological.

Sociological history attempts to avoid such anthropomorphization of the social environment. As Meyer notes, sociology offers the hope that "all shall be explained in terms of man," without ignoring the very real external historical contingencies which impend at all moments. Thus the aforementioned 'social forces' which social historians try to grapple with are sociologically conceptualized and cast in the framework of social systems:

> In liberating themselves from grossly nonhistorical principles of explanation -- gods and demons, dialectical materialisms and idealisms, etc. -- historians have come to see their task as that of understanding the interactions between the human agents of history with their environment. But this has not safeguarded them from neglecting their main task: to incorporate those human agents themselves fully into history. . . . The alternative to an historical psychology must be at some point simply to postulate the existence of something standard, normal and even normative that 'behaves' in history, and to do this, simply to postulate it, is to surrender the historical method.
>
> Probably the most alluring such postulation today is to be found in sociological history, with its freedom not only from theological and metaphysical assumptions but also, supposedly, its freedom from the fallacy of analogies drawn from the natural sciences as well: all shall be explained in terms

> of man. Here, the explanatory context of all events is a social system. Structural and functional sociology is in itself timeless and non-historical; it becomes history, supposedly, with the study of responses to disturbances in the system. These responses constitute the events which historians try to understand, and they find the terms of their understanding given them in the social system. The postulated psychology in this may be 'nothing more' than that of a pure plasticity, a 'human nature' capable of all the known varieties of social systems and more, capable of an infinity of 'social characters' (in which case it becomes tempting to conclude that the words 'human nature' have no operational meaning at all and comprise a needless concept carried over from pre-scientific habits of thought). The question for historians should be clear: suppose such plasticity does in fact describe a reality, how did it come to be? So far, no answer has been forthcoming from the non-historical sciences of biology, neurology, biochemistry; and short of one it is a question for history. History must comprehend its essential subject matter, human nature, in historical terms.[223]

Thus sociology, whatever its benefits, ultimately becomes ahistorical and sociological history comes closer and closer to the mode I orientation in proportion to the degree to which it relies upon sociological methodology. This is, of course, precisely what the social historians wanted to avoid in the first place. We can see that sociological history offers no novel solutions to the dilemma the social historians recognized and tried to resolve.

CONCLUDING COMMENTS

The preceding discussion of various schools of history is not intended to be exhaustive, and our historiographic typology is not meant to be rigid, inflexible, or definitive. The purpose of this lengthy exercise is rather to illustrate how our two modes of inquiry may serve as analytic reference points from which the methodological problems -- often severe -- of the major modern schools of history can be examined from an [for lack of a more suitable term] 'outside' vantage point. Thus our two modes have a heuristic value: allowing understanding of some of the major problems inherent in modern historiography through provision of a conceptual framework from which comparisons of schools of historiography can be made.

Yet we have seen that not one of the schools was fully successful in effecting a synthesis of our two modes of inquiry. Modes I and II provided two antithetical reference points -- such consistent, encompassing, weltanschauungen that existent historiographies either gravitated toward one or the other in their methodologies, or tried to keep equidistant from both, thereby losing virtually all methodological consistency. In short only compromise, not synthesis, was achieved. It is only in mode III that we in fact effect such a synthesis.

It is to facilitate our jump into mode III that we closed our discussion on the 'chaotic state of modern historiography' with the example of sociological history. Our long citation of Meyer points the way. He asks: "how did it come to be?" The 'it' he refers to is that system which sociological theory seeks to describe. Of course, structural-functional sociological theory has in fact articulated a model of the social system which is very compatible with the methodological tenets of mode I. But there are other, opposing, systems -- those of mode II. The essential point is: both mode I and mode II construct meta-systems which -- although opposite -- are both overwhelmingly determinate ones wherein human existential consciousness becomes a dependent variable, an insignificant factor because it is subordinate to larger causal forces. Historicism/relativism in particular attempted to recapture the 'human' historical dimension, but succeeded only at the cost of relegating the historical environment into insignificance.

In other words, the line between man and his environment was never satisfactorily drawn and the interaction of the two never clearly illuminated. Thus, for example, Popper views 'man' as reflexive of material reality; Hegel views him as a 'moment' dependent upon the state of a spiritually unfolding cosmos: in both cases man is but a reflexive speck in a larger cosmological reality. Collingwood's attempt to reverse this state of affairs -- to make man the center of reality and environment the dependent variable -- merely exaggerates in the other direction. Popper and Hegel make the 'system' ahistorical -- it 'exists,' a priori, and binds history rather than being bound by history. Collingwood makes 'man' ahistorical -- the material unfolding of history is merely a superficial trapping for the workings of human thought. Along this continuum, the schools of history analyzed align themselves. [Figure 2 is a crude visual representation of where we may conveniently place the schools of historical thought discussed.]

Mode III questions these ontological priorities. In answering 'where did it come from?' mode III releases both the historical environment (the 'system') and the historical entity ('man') from their ontological stasis and thereby historicizes reality. In this perspective the term 'history' itself becomes transformed, describing not merely a discipline, a subject and/or a work [our three noted uses of the term], but rather the very environmental/existential process of the development of man and his social world through time. The mode III synthesis was effected by Karl Marx.[224] Marx's synthesis was the result of consciously not subordinating any one element of either mode to another. Rather, all elements were incorporated into a grand metaweltanschauung of such breadth that each element became a constituent of an explanatory model whose domain not only includes the mode I and II perspectives but extends to vistas not comprehensible from either conceptual standpoint.

Figure 2: Continuum of Historiographic Orientations

——— MODE I PURE TYPE ———

New Economic History

Quantitative History

Sociological History

New History

- - - - - [Historicist/Relativist
Intellectual
Social] History - - - - -

Psychohistory

Whig History

Religious History

New Psychohistory

Historical Systems

——— MODE II PURE TYPE ———

Footnotes - Chapter IV

[1] Hans Meyerhoff, ed., The Philosophy of History in Our Time (N.Y.: Doubleday Anchor Books, Doubleday & Company, Inc., 1959), p. 291.

[2] Ibid., p. 291.

[3] See Frederich Suppe, ed., The Structure of Scientific Theories (2nd ed.; Illinois: Board of Trustees of the University of Illinois, 1977), pp. 6-15, for a brief overview.

[4] See J.O. Urmson, Philosophical Analysis: Its Development Between The Two World Wars (London: Oxford University Press, 1967) for an account of this development.

[5] Suppe, The Structure of Scientific Theories, p. 619.

[6] Ibid., p. 618.

[7] G.W.F. Hegel, The Phenomenology of Mind, translated, with an Introduction and Notes, by J.B. Baillie. Introduction to the Torchbook ed. by George Lichtheim (Harper Torchbooks ed.; N.Y.: Harper & Row, 1967).

[8] G.W.F. Hegel, Reason in History: A General Introduction to the Philosophy of History, translated by Robert S. Hartman, a vol. in The Library of Liberal Arts (N.Y.: The Bobbs-Merrill Company, Inc., 1953).

[9] Giambattista Vico, The New Science of Giambattista Vico, translated from the third edition (1774) by Thomas Goddard Bergin and Max Harold Fisch (Ithaca, N.Y.: Cornell University Press, 1948), p. 349. "Book IV" of The New Science, entitled "The Course the Nations Run," outlines his "ideal history" and provides the most abstract and encompassing account of Vico's theory.

[10] Oswald Spengler, "The World as History" in Theories of History, ed. by Patrick Gardner. A vol. in The Free Press Textbooks in Philosophy, general editor Paul Edwards (N.Y.: The Free Press, 1959), p. 190.

[11] Oswald Spengler, The Decline of the West, trans. and notes by Charles F. Atkinson (3 vols.; N.Y.: Alfred A. Knopf, 1926-1928). See also James K. Feibleman, Understanding Civilizations: The Shape of History (N.Y.: Horizon Press, 1975), pp. 142-157, for an overview of Spengler's ideas.

[12] Pitirim A. Sorokin, Social and Cultural Dynamics (4 vols.; N.Y.: American Book Co., 1937-1941) and Pitirim A. Sorokin, The Crises of Our Age (N.Y.: E.P. Dutton & Co., Inc., 1941). See also John Edward Sullivan, Prophets of the West: An Introduction to the Philosophy of History (N.Y.: Holt, Rinehard and Winston, Inc., 1970), pp. 200-219 for an overview of Sorokin's philosophy of history.

[13] See Pitirim A. Sorokin, "Toynbee's Philosophy of History" in Pieter Geyl, Arnold J. Toynbee and Pitirim A. Sorokin, The Pattern of the Past: Can We Determine It? (Boston: The Beacon Press, 1949) for Sorokin's own comparison of his view of history with that of Toynbee's.

[14] Arnold J. Toynbee, A Study of History, Vol. I, Abridged into two volumes by D.C. Somervell (Laurel ed.; N.Y.: Dell Publishing Co., Inc., 1965), p. 20.

[15] Gardner, ed., Theories of History, p. 200.

[16] Meyerhoff, ed., The Philosophy of History in Our Time, p. 291. See also footnote 2. We note that this is not Meyerhoff's position -- he is merely describing a historiographic trend.

[17] As cited in Gardner, ed., Theories of History, p. 210.

[18] See chapter 1, p. 1.

[19] Jacques Maritain, On the Philosophy of History, ed. by Joseph W. Evans (London: Geoffrey Bles, 1959), p. 2.

[20] George La Piana, "Theology of History" in The Interpretation of History, ed. by Joseph R. Strayer (N.Y.: Peter Smith, 1950), p. 151.

[21] Ibid., pp. 151-152.

[22] Kenneth Scott Latourette, "The Christian Understanding of History," in Nash, ed., Ideas of History, Vol. 1, pp. 224-245.

[23] Ibid., pp. 224-227.

[24] Ibid., p. 227.

[25] Ibid., p. 224.

[26] Reinhold Niebuhr, Faith and History: A Comparison of Christian and Modern Views of History (N.Y.: Charles Scribner's Sons, 1949), p. 22. Also cited in Nash, ed., Vol. I, p. 245.

[27] Jacques Maritain, On The Philosophy of History, ed. by Joseph Evans (London: Geoffrey Bles, 1959), p. 1.

[28] Sullivan, Prophets of the West, p. 263.

[29] Karl Lowith, Meaning in History (Chicago: The University of Chicago Press, 1949), p. 19. For an analysis of Lowith's view see Berthold P. Riesterer, Karl Lowith's View of History: A Critical Appraisal of Historicism (The Hague: Martinus Nijhoff, 1969).

[30] Lowith, Meaning in History, p. 5. Italics in original.

[31] Erich Kahler, The Meaning of History (Meridian Books ed.; N.Y.: The World Publishing Company, 1968), p. 22.

[32] Ibid., p. 195. Italics in original.

[33] Ibid., p. 208.

[34] Ibid., p. 219.

[35] Lee Benson, "An Approach to the Scientific Study of Past Public Opinion" in Toward the Scientific Study of History: Selected Essays of Lee Benson, ed. by Lee Benson (N.Y.: J.B. Lippincott Company, 1972), p. 112.

[36] E.H. Carr, What is History?, Pelican Books (Harmondsworth, Middlesex, England: Penguin Books Ltd., 1964), p. 15.

[37] Maurice Mandelbaum, The Problem of Historical Knowledge: An Answer to Relativism (Harper Torchbook edition; N.Y.: Harper & Row, 1967), p. 189. See also footnote 117 of our second chapter.

[38] Meyerhoff, ed., The Philosophy of History in Our Time, p. 13.

[39] William O. Aydelotte, "Quantification in History," The American Historical Review, Vol. 71, No. 3 (April, 1966), pp. 807-808. The various studies Aydelotte acknowledges reference to are, in order: Clarence Crane Brinton, The Jacobins: An Essay in the New History (N.Y., 1930), 70-72; Donald Greer, The Incidence of the Terror During the French Revolution: A Statistical Interpretation (Cambridge, Mass., 1935), 97-98; Richard P. McCormick, "New Perspectives on Jacksonian Politics," American Historical Review, LXV (Jan. 1960), 288-301, esp. 289-91; Richard Hofstadter et al., The American Republic (2 vols., New York, 1959), I, 391; Charles A. and Mary R. Beard, The Rise of American Civilization (new ed., 2 vols., New York, 1931), I, 550; Arthur M. Schlesinger, Jr., The Age of Jackson (Boston, 1945), 36; Albert Ludwig Kohlmeier, The Old North-West as the Keystone of the Arch of American Federal

Union: A Study in Commerce and Politics (Bloomington, Ind., 1938); Stephan Thernstrom, Poverty and Progress: Social Mobility in a Nineteenth Century City (Cambridge, Mass., 1964); Thomas B. Alexander et. al., "Who Were the Alabama Whigs?," Alabama Review, XVI (No. 1, 1963), 5-19; Thomas B. Alexander and Peggy J. Duckworth, "Alabama Black Belt Whigs During Secession: A New Viewpoint," ibid., XVII (No. 3, 1964), 181-97; Bernard and Lotte Bailyn, Massachusetts Shipping, 1697-1714: A Statistical Study (Cambridge, Mass., 1959); Allan G. Bogue, From Prairie to Corn Belt: Farming on the Illinois and Iowa Prairies in the Nineteenth Century (Chicago, 1963); Jean Delumeau, L'alun de Rome, xv^e^-xix^e^ siecle (Paris, 1962), and Le mouvement du port de Saint-Malo a la fin du xvii^e^ siecle, 1681-1700 (Rennes, 1962); Robert William Fogel, Railroads and American Economic Growth: Essays in Econometric History (Baltimore, 1964); Frank Lawrence Owsley, Plain Folk of the Old South (Baton Rouge, La., 1949); Lawrence Stone, "The Educational Revolution in England, 1560-1640," Past and Present XXVIII (July, 1964), 41-80, and The Crisis of the Aristocracy, 1558-1641 (Oxford, Eng., 1965); Charles Tilly, The Vendee (Cambridge, Mass., 1964); Sylvia L. Thrupp, The Merchant Class of Medieval London, 1300-1500 (Chicago, 1948); Sam B. Warner, Jr., Streetcar Suburbs: The Process of Growth in Boston, 1870-1900 (Cambridge, Mass., 1962). These references are made by Aydelotte on pp. 807-808, footnotes 7-12 inclusive. For a comprehensive view of Aydelotte's views, see William O. Aydelotte, Quantification in History (Reading, Mass., Addison-Wesley Publishing Company, 1971).

[40] As cited in Aydelotte, "Quantification in History," p. 804.

[41] As cited in Aydelotte, "Quantification in History," p. 806. The reference is from G. Kitson Clark, The Making of Victorian England (London: 1962), p. 14.

[42] One writer has commented that this maturity came with "William Aydelotte's scalogram analysis of voting patterns in the British House of Commons in the 1840's, which appeared in January 1963, [which] is the first published work by an historian involving computerized research, and a statistical method." Robert P. Swierenga, ed., Quantification in American History: Theory and Research (N.Y.: Atheneum, 1970), p. xv.

[43] Aydelotte, "Quantification in History," p. 804.

[44] Ibid., p. 806.

[45] Stefania Kowalska-Glickman, "Quantitative Methods in History," The Journal of European Economic History, Vol. 3, No. 1 (Spring, 1974), pp. 189-190. Italics in original.

[46] Ibid., pp. 189-201.

[47] Aydelotte, "Quantification in History," pp. 808-809.

[48] Maurice Mandelbaum, *The Anatomy of Historical Knowledge* (Baltimore: The John Hopkins University Press, 1977), p. 124.

[49] Eric E. Lampard, "Two Cheers for Quantitative History: An Agnostic Foreward" in *The New Urban History: Quantitative Explorations by American Historians*, ed. by Leo F. Schnore (Princeton: Princeton University Press, 1975), pp. 18-19. Italics in original.

[50] See Kowalska-Glickman, "Quantitative Methods in History," pp. 189-201, for an overview. Albert Fishlow, "The New Economic History Revisited," *The Journal of European Economic History*, Vol. 3, No. 2 (Fall, 1974), pp. 453-467, and David J. Loschky, "What's Happening in the New Economic History?," *The Journal of European Economic History*, Vol. 3, No. 3 (Winter, 1974), pp. 747-758, discuss both logic and the search for laws (as applied specifically to economic history).

[51] See Lee Benson, *Toward the Scientific Study of History*, for Benson's major theoretical statements.

[52] Michael Katz, "Quantification and the Scientific Study of History," *Historical Methods Newsletter*, Vol. 6, No. 2 (March, 1973), p. 64.

[53] Ibid., p. 64.

[54] Roderick Floud, *An Introduction to Quantitative Methods for Historians* (Princeton: Princeton University Press, 1973), p. 4. Perhaps more instructive is a short essay by Ian Winchester: Ian Winchester, "A Brief Survey of the Algorithmic, Mathematical and Philosophical Literature Relevant to Historical Record Linkage" in *Identifying People in the Past*, ed. by W.A. Wrigley (London: Edward Arnold Ltd., 1973), pp. 128-154. Although Winchester is discussing a demographic concern -- record linkage methods -- he places these into a broader perspective and notes, on p. 149:

> There are, however, a number of problems which record linkage theory and practice bring to light which will never be decided by mathematical theory. I have in mind such questions as the following:
>
> 1. What is involved in making a historical reference and what are the general conditions under which a historical reference may be successfully brought about?

2. Under what circumstances are we entitled to say that we have successfully identified a historical individual? Under what circumstances are we justified in concluding that a particular historical individual existed?
3. What general process or processes underlies the growth of historical knowledge -- if any?

[55] Elias H. Tuma, "New Approaches in Economic History and Related Social Sciences," The Journal of European Economic History, Vol. 3, No. 1 (Spring, 1974), p. 185.

[56] Albert Fishlow, "The New Economic History Revisited," The Journal of European Economic History, Vol. 3, No. 2 (Fall, 1974), p. 459.

[57] Tuma, "New Approaches in Economic History and Related Social Sciences," p. 169.

[58] Ibid., p. 171. See also Lance E. Davis, J.R.T. Hughes and Stanley Reiter, "Econometrics" in American History and the Social Sciences, ed. by Edward N. Saveth (Glencoe: The Free Press of Glencoe, 1964). Davis et al. differentiate between "quantitative economic history" and "non-quantitative writing in economic history." The difference "lies partly in the nature of the materials from which the reconstruction is to be made, and partly in the techniques employed to analyze these materials." (p. 450) Their short article (pp. 449-457) offers both a history and analysis of the new economic history.

[59] Fishlow, "The New Economic History Revisited," p. 463.

[60] Peter D. McClelland, Causal Explanation and Model Building in History, Economics, and the New Economic History (Ithaca, N.Y.: Cornell University Press, 1975), p. 176. McClelland credits S. Reiter with the coining of the term 'cliometrics,' and J.R.T. Hughes with the phrase 'new economic history.' McClelland's section entitled "What Is New in the New Economic History?" (pp. 175-178) offers a brief historical analysis of the movement.

[61] Davis et al., "Econometrics," p. 451.

[62] Aydelotte, "Quantification in History," p. 809.

[63] Fishlow, "The New Economic History Revisited," p. 459.

[64] David Braybrooke, review of Causal Explanation and Model Building in History, Economics, and the New Economic History, by Peter D. McClelland, in History and Theory, Vol. XVI, No. 3 (1977), pp. 337-338.

[65] For a discussion of this method see George G.S. Murphy, "On Counterfactual Propositions," History and Theory, Beiheft 9: Studies in Quantitative History and the Logic of the Social Sciences (1969), pp. 14-38.

[66] McClelland, Causal Explanation and Model Building, p. 172.

[67] Fishlow, "The New Economic History Revisited," pp. 457-458. Italics in original.

[68] Paul Conkin, "Causation Revisited," History and Theory, Vol. XIII, No. 1 (1974), pp. 18-19.

[69] Howard Adelman, "Rational Explanation Reconsidered: Case Studies and the Hempel-Dray Model," History and Theory, Vol. XIII, No. 1 (1974), pp. 208-224.

[70] Meyerhoff, ed., The Philosophy of History in Our Time, p. 14. 'Historicism,' here, is not used in the Popperian sense. As Dwight E. Lee and Robert Beck, "The Meaning of 'Historicism,'" American Historical Review, Vol. LIX, No. 3 (April, 1954), pp. 568-577, point out, Popper's use of the term [which we have noted in chapter 2] is "unfortunate" (p. 577) because it is wholly different from mainstream usages. Our meaning here follows Meyerhoff's -- i.e. repudiation of universal statements and emphasis upon the 'meaning' of events.

[71] Meyerhoff, ed., The Philosophy of History in Our Time, pp. 18-22. Italics in original. Meyerhoff is here documenting how historicists feel history differs from the physical sciences -- but the arguments are applicable to both mode I and mode II.

[72] Ibid., p. 10.

[73] As noted in R.G. Collingwood, The Idea of History (Galexy ed.; N.Y.: Oxford University Press, 1956), p. 166.

[74] Peter Winch, The Idea Of A Social Science and Its Relation to Philosophy, a vol. in Studies in Philosophical Psychology, ed. by R.F. Holland (London: Routledge & Kegan Paul, 1958), p. 23.

[75] Ibid., pp. 27-33; 40-65.

[76] Ibid., p. 107. Italics in original.

[77] Ibid., pp. 115-116. Italics in original.

[78] Collingwood, The Idea of History, pp. 282-302.

[79] Ibid., p. 302.

[80] The analysis of Berlin's views found in this chapter we have, in extended form, undertaken elsewhere: Kas Mazurek, "Sir Isaiah Berlin's Philosophy of History: Structure; Method; Implications," Philosophy and Social Criticism, Vol. 6, No. 4, pp. 394-405.

[81] Isaiah Berlin, "The Concept of Scientific History," in Dray, ed., Philosophical Analysis and History, pp. 13-49.

[82] Ibid., p. 40.

[83] Collingwood too recognizes the existence of such a quantifiable environment, and also treats it as a mere backdrop for what he deems to be the real business of historical inquiry.

> The historian, investigating any event in the past, makes a distinction between what may be called the outside and the inside of an event. By the outside of the event I mean everything belonging to it which can be described in terms of bodies and their movements: . . . By the inside of the event I mean that in it which can only be described in terms of thought: . . . The historian is never concerned with either of these to the exclusion of the other. He is investigating not mere events (where by a mere event I mean one which has only an outside and no inside) but actions, and an action is the unity of the outside and inside of an event. . . . His work may begin by discovering the outside of an event, but it can never end there; he must always remember that the event was an action, and that his main task is to think himself into this action, to discern the thought of its agent. (Collingwood, The Idea of His History, p. 213.)

This point is also emphasized by William Debbins in his "Introduction" in R.G. Collingwood, Essays in the Philosophy of History, edited with an Introduction by William Debbins (Austin, Texas: University of Texas Press, 1965). As Debbins states:

> Collingwood emphasizes that the historian's main task is to discern the thought of his agent, but one must not overlook the obvious; the historian must know what was going on externally before he can do this. The historian's first task is to reconstruct a spatiotemporal picture of the past, which he may then understand by penetrating to the 'inside' of the events he has depicted. (p. xvii)

[84] Berlin, "The Concept of Scientific History," p. 31.

[85] Isaiah Berlin, Historical Inevitability, Auguste Comte Memorial Lecture No. 1, delivered on 12 May 1953 at the London School of Economics (London: Oxford University Press, 1954), p. 54.

[86] Isaiah Berlin, Four Essays on Liberty (London: Oxford University Press, 1969), p. iv.

[87] Berlin, "The Concept of Scientific History," p. 44.

[88] Ibid., p. 30.

[89] Ibid., p. 50.

[90] Berlin, Historical Inevitability, p. 16.

[91] Berlin, "The Concept of Scientific History," p. 45.

[92] Ibid., p. 56.

[93] Ibid., p. 12.

[94] Ibid., p. 41.

[95] Ibid., p. 49.

[96] Carr, What Is History?, p. 23.

[97] Ibid., p. 12.

[98] Ibid., p. 23.

[99] Ibid., pp. 22-25, passim.

[100] Ibid., pp. 31-55, passim.

[101] Ibid., pp. 35-40, passim.

[102] Ibid., p. 44.

[103] Ibid., p. 123.

[104] For an analysis of Charles A. Beard's and Carl L. Becker's historiographic ideas set against the backdrop of trends in American historiography in the first half of this century, see John Higham, Leonard Krieger and Felix Gilbert, History: The Development of Historical Studies in the United States (Englewood Cliffs, N.J.: Prentice-Hall Inc., 1965), pp. 117-131.

[105] Geoffrey Barraclough, "The Historian in a Changing World" in Meyerhoff, ed., The Philosophy of History in Our Time, p. 30. Barraclough's footnoted citations [footnotes #7, 8, 9] are, in order, from P. Lean, "The Terror of History," The Listener, LIV (1955), p. 16; H. Butterfield, History and Human Relations (1951), p. 108, and Butterfield, Ibid., p. 14; 17.

[106] Isaiah Berlin, "Determinism, Relativism, and Historical Judgments" in Gardiner, ed., Theories of History, p. 324.

[107] Isaiah Berlin, "The Concept of Scientific History," p. 37.

[108] Isaiah Berlin, "Logical Translation," in Proceedings of the Aristotelian Society, New Series, Vol. L, seventy-first session, 1949-1950 (London: Harrison and Sons Ltd., 1950), pp. 186-187.

[109] Ibid., p. 12.

[110] Isaiah Berlin, Four Essays on Liberty (London: Oxford University Press, 1969), p. lxii.

[111] Berlin, "The Concept of Scientific History," p. 43.

[112] Berlin, Historical Inevitability, pp. 51-52.

[113] Henri Pirenne, "What Are Historians Trying To Do?" in Meyerhoff, ed., The Philosophy of History in Our Time, p. 95.

[114] Berlin, "The Concept of Scientific History," p. 50.

[115] Meyerhoff, ed., The Philosophy of History in Our Time, p. 86. The essay by Henri Pirenne which he is commenting on is "What Are Historians Trying To Do?," pp. 87-99 of Meyerhoff's edited work.

[116] Meyerhoff, ed., The Philosophy of History in Our Time, p. 138.

[117] L.B. Namier, Avenues of History (London: Hamish Hamilton Ltd., 1952), p. 1. See also footnote 69 of our second chapter.

[118] Ibid., p. 1.

[119] Ibid., pp. 1-10.

[120] Ibid., p. 3.

[121] Ibid., p. 4.

[122] Ibid., p. 5.

[123] Ibid., p. 6.

[124] Ibid., p. 8.

[125] Ibid., p. 8.

[126] Ibid., p. 10.

[127] See Beard's article of the same title: Charles A. Beard, "Written History As An Act of Faith" in Meyerhoff, ed., *The Philosophy of History in Our Time*, pp. 140-151.

[128] Arthur Marwick, *The Nature of History* (Delta ed.; N.Y.: Dell Publishing Co., Inc., 1970), p. 103.

[129] As Marwick, rather casually, states:

> The fashion for intellectual history was . . . associated with the tide of philosophical doubt which swept the Western world in the aftermath of the First World War, washing away much of the older faith in the existence of solid historical 'facts.' 'Everything is relative' and 'It's all in the mind, anyway' were the cant phrases which affected and reflected thinking at all levels of intellectual activity. (Marwick, *The Nature of History*, p. 87.)

[130] This is what Arthur O. Lovejoy, *The Great Chain of Being: A Study of the History of an Idea* (Cambridge, Mass.: Harvard University Press, 1936), undertakes. We stated in chapter one that we approve of Lovejoy's recognition that superficial differences between philosophic viewpoints may in fact obscure fundamental, structural, similarities. Lovejoy, however, goes further and changes what is a methodological analysis to an ontological critique. Thus the "three ideas which have, throughout the greater part of the history of the West, been so closely and constantly associated that they have often operated as a unit" [p. 20] take on a Platonic permanence which obscures the cognitive, rationalistic, psychological and epistemological processes of idea construction and thus attention is shifted to a very idealistic analysis of the ideas as ontologically *sui generis*. Failure to draw this distinction partly accounts for the difficulties which mark his introductory, methodological, chapter ("The Study of the History of Ideas") to his remarkable *The Great Chain of Being* [pp. 3-23]. The problems inherent in equating intellectual history with the study of the history of 'eternal ideas' are extensively analyzed in a now classic essay of Skinner's: Quentin Skinner, "Meaning and Understanding in the History of Ideas," *History and Theory*, Vol. I (1969), pp. 3-53. Accepting the Platonic notion that eternal and universal ideas exist is what Skinner designates (and refutes) as the "text approach" [pp. 3-39].

[131] A point stressed in Felix Gilbert, "Intellectual History: Its Aims and Methods" in Felix Gilbert and Stephen R. Graubard, eds. Historical Studies Today (N.Y.: W.W. Norton & Company, Inc., 1972), p. 155.

[132] This is closely tied to the idea of Zeitgeist. As Gilbert notes, "there is still a Hegelian flavor in the assumption that each period has its own Zeitgeist." Gilbert, "Intellectual History: Its Aims and Methods," p. 155. This notion of the 'progress of ideas' is also closely related to another historiographic orientation -- the whig school -- of which more will be said shortly.

[133] Gilbert, "Intellectual History: Its Aims and Methods," p. 155.

[134] John Higham, "Intellectual History And Its Neighbors," Journal of the History of Ideas, Vol. XV, No. 3 (June, 1954), p. 340.

[135] Gilbert, "Intellectual History: Its Aims and Methods," p. 155.

[136] Higham, "Intellectual History and Its Neighbors," p. 341. Higham criticizes these two approaches and concludes with a call for a more "synthetic" form of intellectual history [p. 347].

[137] Ibid., p. 341.

[138] Ibid., p. 347.

[139] Ibid., p. 347.

[140] Gilbert, "Intellectual History: Its Aims and Methods," p. 155.

[141] Gerald Izenberg, "Psychohistory and Intellectual History," History and Theory, Vol. XIV (1975), p. 140. A broad-ranging and most interesting essay of Manuel's -- Frank E. Manuel, "The Use and Abuse of Psychology in History," in Varieties of Psychohistory, ed. by George M. Kren and Leon H. Rappoport (N.Y.: Springer Publishing Company, 1976) -- discusses the antecedents to psychohistory [see especially pp. 38-53]. Interestingly, for our purposes, psychohistory's connections with historicism, and some exemplars of mode II, are also touched upon. The latter point becomes a concern in our work momentarily.

[142] Izenberg, "Psychohistory and Intellectual History," p. 141. Erikson's classic work is: Erik H. Erikson, Young Man Luther: A Study in Psychoanalysis and History (London: Faber and Faber Ltd., 1959).

[143] A most sensitive discussion of the Freudian legacy of psychohistory is found in Erikson's Young Man Luther. For a concise and very insightful examination of Freud's historical views see Philip Rieff, "The Meaning of History and Religion in Freud's Thought," in Psychoanalysis and History, ed. by Bruce Mazlish (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963), pp. 23-44.

[144] Mazlish, ed., Psychoanalysis and History, p. 2.

[145] Bruce Mazlish, "What Is Psychohistory?" in Kren and Rappoport, Varieties of Psychohistory, p. 21.

[146] Robert J. Lifton, review of Psychoanalysis and History, ed. by Bruce Mazlish, in History and Theory, Vol. IV (1964-1965), p. 353.

[147] Rieff, "The Meaning of History and Religion in Freud's Thought" in Mazlish, Psychoanalysis and History, p. 26.

[148] Ibid., p. 37.

[149] Lifton, review of Psychoanalysis and History, pp. 357-358. Italics in original.

[150] Ibid., p. 358.

[151] Lloyd deMause, ed., The New Psychohistory (N.Y.: The Psychohistory Press, 1975), p. 4.

[152] Lloyd deMause, "The Evolution of Childhood" in The History of Childhood, ed. by Lloyd deMause (Harper Torchbook ed.; N.Y.: Harper & Row, 1975), pp. 1-73.

[153] Lifton, review of Psychoanalysis and History, p. 354. Italics in original. The essay referred to is Philip Rieff, "The Meaning of History and Religion in Freud's Thought," pp. 23-44.

[154] Bruce Mazlish, "What is Psychohistory?" in Kren and Rappoport, Varieties of Psychohistory, p. 18.

[155] Rieff, "The Meaning of History and Religion in Freud's Thought," p. 35.

[156] As noted by Rieff, "The Meaning of History and Religion in Freud's Thought," p. 30. For Freud's views, see, especially, Sigmund Freud, Civilization and Its Discontents, translated and edited by James Strachey (N.Y.: W.W. Norton & Company, Inc., 1962); and Sigmund Freud, The Future of an Illusion, translated by W.D. Robson-Scott, revised and newly edited by James Strachey (Anchor Books ed.; Garden City, N.Y.: Doubleday & Company, Inc., 1964).

[157] Mazlish, ed., Psychoanalysis and History, p. 4.

[158] deMause, "The Evolution of Childhood," p. 3.

[159] Herbert Butterfield, The Englishman And His History, Vol. 19 of Current Problems, general editor Sir Ernest Barker (London: Cambridge University Press, 1944).

[160] Marwick, The Nature of History, p. 52. Carr goes much further, calling Macaulay "incomparably the greatest of the Whig historians." Carr, What is History?, p. 32.

[161] Marwick, The Nature of History, p. 52.

[162] Ibid., pp. 54-56.

[163] Ibid., pp. 70-71. In speaking of Trevelyan's England Under Queen Anne, Carr states that hidden therein is "the best summary of what is nowadays called the Whig interpretation of history":

> For, if following the technique of connoisseurs of detective novels, you read the end first, you will find on the last few pages of the third volume the best summary known to me of what is nowadays called the Whig interpretation of history; and you will see that what Trevelyan is trying to do is to investigate the origin and development of the Whig tradition, and to root it fairly and squarely in the years after the death of its founder, William III. (p. 23)

Carr's reference is to George Macaulay Trevelyan, England Under Queen Anne, Vol. III, The Peace and the Protestant Succession (N.Y.: Longman's, Green and Co., 1934), pp. 315-321.

[164] Butterfield, The Englishman and His History, p. v. Carr notes this reversal in Butterfield's position; as does Fischer. See E.H. Carr, What is History?, p. 42; and David Hackett Fischer, Historian's Fallacies: Toward a Logic of Historical Thought (Harper Torchbook ed.; N.Y.: Harper & Row, 1970), p. 139.

[165] Page Smith, The Historian and History (N.Y.: Alfred A. Knopf, 1964), p. 159.

[166] Ibid., p. 159.

[167] Terry Copp, "The Whig Interpretation of Canadian History," in Teaching History in Canada, ed. by Geoffrey Milburn (Toronto: McGraw-Hill Ryerson Limited, 1972), p. 110. Copp lists Edgar McInnis and J.A. Lower as recent whig historians (pp. 111-112).

[168] Gerald Walsh, "A Survey of Philosophies of History in Canadian High Schools," in Milburn, ed., Teaching History in Canada, p. 131.

[169] Herbert Butterfield, The Whig Interpretation of History (Norton Library ed.; N.Y.: W.W. Norton & Company, Inc., 1965), p. 12.

[170] Gerald Walsh, "A Survey of Philosophies of History in Canadian High Schools," p. 131.

[171] Ibid., p. 131. See also Butterfield, The Whig Interpretation of History, p. 7; 24.

[172] Butterfield, The Whig Interpretation of History, p. 24.

[173] Walsh, "A Survey of Philosophies of History in Canadian High Schools," p. 131.

[174] Butterfield, The Whig Interpretation of History, p. 11. See also Copp, "The Whig Interpretation of Canadian History," p. 109.

[175] Butterfield, The Whig Interpretation of History, p. 5.

[176] Ibid., p. 109.

[177] Ibid., p. 11.

[178] Fischer, Historians' Fallacies, p. 139.

[179] Butterfield on p. 113 of The Whig Interpretation of History, commenting on Acton's views on "the moral function of history," draws an analogy with Hegel:

> It is an attractive exaltation of history, which gives it the power to bind and loosen, to be the arbiter of controversy, to reign and not to serve; but one may believe that it is a theory which takes too short a cut to the absolute. It is history encroaching like the Hegelian state, till it becomes all-comprehensive, and stands as the finality in a moral world; . . .

[180] Marwick, The Nature of History, p. 110.

[181] Higham et al., History, p. 108. As Higham et al. continue, on the same page, in a footnote:

> The first considerable report of the new German wisdom was Fred M. Fling's 'Historical Synthesis,' AHR, ix (1903), 1-22. Note Fling's defensiveness about history and his delight that Rickert has supplied 'a scientific basis for the methods of history.'

[182] Ibid., pp. 109-112.

[183] Ibid., p. 113.

[184] Quoted in Marwick, The Nature of History, p. 82.

[185] Ibid., p. 83.

[186] James Harvey Robinson, The New History: Essays Illustrating The Modern Historical Outlook, with a Foreword by Benjamin Keen (Springfield, Mass.: The Walden Press, 1958).

[187] Marwick, The Nature of History, p. 88.

[188] Keen, "Editor's Foreword" in Robinson, The New History.

[189] Marwick, The Nature of History, p. 87.

[190] Higham et al., History, p. 113.

[191] For one analysis of Dewey's historical views, see Henry W. Hodysh, "Historical Theory and Social Change in John Dewey's Philosophy," Educational Theory, Vol. 20, No. 3 (Summer, 1970), pp. 245-252. Hodysh questions:

> The place of Dewey's values in historical research is brought into question if one accepts his view that history may clarify ethical problems and point the way to social reconstruction. Might not such an approach to inquiry lead to a distortion of the past? How, for example, does the 'direction of movement' affect the determination of evidence? In what sense does this direction, toward what Dewey calls 'stated outcomes,' act as a 'lever for moving the present into a certain kind of future?' Moreover, is Dewey's use of the inquiry method in history free from any moral and ideal meanings he might wish to foster? (p. 246)

Above, Hodysh is quoting from John Dewey's Logic: The Theory of Inquiry (N.Y.: Henry Holt and Co., 1938).

[192] Gross undertakes an excellent and insightful analysis of Robinson and the 'new history' in David Gross, "The 'New History': A Note of Reappraisal," History and Theory, Vol. 13 (1974), pp. 53-58. He specifically focuses upon what we term the whigish tendency in the new history, and he relates this to the neo-Darwinian perspective of Robinson and the new historians:

> . . . an assumption Robinson never seriously questioned in The New History -- was that the only 'reasonable' position to take to the world as given is adjustment to it. Here the notion of 'adaptation' occupied a place of central importance. In Darwinian language, Robinson pointed out time and again that the ideal for humanity was to become 'perfectly adjusted to [the] environment.' Our task, he wrote, is 'conscious social adjustment' and following that, 'emotional adjustment.' To this end, he added, we must learn how to 'readjust our views so as to adapt them to our present environment.' In proclaiming this Robinson assumed that the present was simply the culmination of the past -- the high point and logical unfolding of everything that had gone before. This being the case, it made good sense not only to accept 'what is' but to celebrate it and acclimate oneself to it. (p. 54)

Above, Gross acknowledges reference to pp. 22; 103; 131; and 246 of Robinson's The New History.

[193] Higham et al., History, pp. 115-116.

[194] Ibid., p. 116.

[195] Ibid., p. 190.

[196] Gilbert, "Intellectual History: Its Aims and Methods," p. 150.

[197] Alan Bullock, Is History Becoming a Social Science? The Case of Contemporary History, The Leslie Stephen Lecture, 1976 (London: Cambridge University Press, 1977), p. 3.

[198] Fischer, Historians' Fallacies, p. 218.

[199] See H.J. Perkin, "Social History," in Approaches to History: A Symposium, ed. by H.P.R. Finberg (London: Routledge & Kegan Paul Limited, 1962), pp. 51-82. Perkin outlines the history

of the concept of social history, as well as drawing the interconnections of the various forms of history allied with social history. His listing is far from exhaustive -- but it is very insightful. For a review of the Canadian literature falling into the broad category of 'social history' see Michael S. Cross, "Recent Writings in Social History," History and Social Science Teacher, Vol. 14, No. 3 (Spring, 1979), pp. 155-164.

[200] Gilbert, "Intellectual History: Its Aims and Methods," pp. 154-155.

[201] Bernard Bailyn, Education in the Forming of American Society: Needs and Opportunities for Study (Chapel Hill, N.C.: The University of North Carolina Press, and, N.Y.: W.W. Norton & Company, Inc., 1960), pp. 3-4.

[202] Cross, "Recent Writings in Social History," p. 155.

[203] E.J. Hobsbawm, "From Social History to the History of Society," in Essays in Social History, ed. by M.W. Flinn and T.C. Smout (London: Oxford University Press, 1974), p. 1. As we have noted in footnote 199 Perkin, in his essay "Social History," outlines the history of the concept of social history.

[204] Hobsbawm, "From Social History to the History of Society," p. 2.

[205] Ibid., p. 5.

[206] Perkin, "Social History."

[207] Ibid., pp. 51-52. Perkin acknowledges reference to Namier's "History, Its Subject Matter and Tasks," History Today, II (1952), p. 161.

[208] Perkin, "Social History," p. 53.

[209] Ibid., pp. 59-60.

[210] Ibid., p. 67.

[211] Ibid., pp. 66-67. Perkin acknowledges borrowing Rowse's phrase from A.L. Rowse, The Elizabethan Age: I, The England of Elizabeth: The Structure of Society, 1950, p. viii.

[212] Perkin, "Social History," p. 74. Italics in original.

[213] Ibid., p. 77.

[214] Ibid., p. 79.

[215] See Marwick, The Nature of History, pp. 156-169; and Richard Hofstadter, "History and Sociology in the United States," in Sociology and History: Methods, ed. by Seymour Martin Lipset and Richard Hofstadter (N.Y.: Basic Books, Inc., 1968), pp. 3-19.

[216] Hofstadter, "History and Sociology in the United States," p. 18.

[217] H.R. Trevor-Roper, "The Past and the Present: History and Sociology," Past and Present, No. 42 (Feb., 1969), p. 12.

[218] Ibid., pp. 3-17.

[219] Marwick, The Nature of History, pp. 156-157.

[220] Seymour Martin Lipset, "History and Sociology: Some Methodological Considerations," in Lipset and Hofstadter, Sociology and History, p. 23.

[221] Ibid., p. 51.

[222] See Marwick, The Nature of History, pp. 161-167, for an overview of some of these advantageous methodological borrowings.

[223] Donald B. Meyer, review of Young Man Luther, by Erik H. Erikson, in History and Theory, Vol. I (1960-1961), p. 294. Italics in original.

[224] We must stress that Meyer, as the preceding footnote illustrates, explicitly rejects the Marxian orientation. Our reference was only to Meyer's recognition that sociological history does not address the question of the determinants of the sociological system itself. He thereby recognizes an important inherent limitation which we wish to pursue in our own way -- a way which quickly brings us into direct conflict with Meyer's views.

CHAPTER V

MODE III: MARX'S SYNTHESIS

The greatest strength of mode I and II lies in the remarkable internal, logical, consistency -- sweeping from ontological presupposition to historiographic practice -- of both world views. The greatest shortcoming of each mode is that both posed some questions and investigated some aspects of reality wholly outside the scope and method of the other. The ultimate methodological tragedy of the historiographies discussed in chapter four is that all perceived -- in varying degrees of clarity -- the polarities of the mode I and II orientations, yet could not resolve their fundamental antipathies. The cost of unsuccessful compromise was loss of methodological consistency through internalization of conflicting elements of both modes. We now turn to what, it is argued, is in fact the first successful synthesis of modes I and II into a qualitatively new investigative and explanatory paradigm -- one which at once retains the strengths, dissolves the antipathies, and expands the investigative and heuristic fields of its component perspectives. The corpus of Karl Marx's writings contain such a synthesis -- this is our third mode of inquiry.

Five qualifications before undertaking our exposition of mode III.

METHODOLOGICAL GUIDELINES

(i) Marx's Works Considered as a Corpus

Above all, we are not going on yet another journey in search of the 'real Marx.' Post-Marx literature abounds with theses on, to borrow a phrase from H.B. Acton, "what Marx really said."[1] The core -- but not the entirety -- of such debate focuses on the now famous "epistemological break" which Althusser believes Marx effected -- supposedly in 1845 with his Thesis on Feuerbach and The German Ideology.[2] Our approach is to treat the entirety of Marx as a whole. In so doing we seek to outline the fundamentals of Marx's thoughts, and it is only in the next chapter that we will illuminate the polarization of his concepts [for which such divisions as splitting his work into the 'young' and 'mature' Marx serve as one basis]. This is neither a strategy of elusiveness nor a forewarning of unwarranted reductionism. It is, rather, a recognition that -- because Marx was so prolific a writer -- one can, as a friend and colleague has noted, sort of pick and choose citations from Marx to compose quite differing pictures of his orientation. The result: an intellectual smorgasbord of well documented current hypotheses on the 'real Marx.'

Such intellectual puzzle construction obscures one crucial fact: beneath all the 'varieties' of Marxism there is an identifiable core of concepts and methods which all 'Marxists' recognize if they are to call themselves such. It is toward illuminating that foundation that this chapter dedicates itself. In other words, just as there are innovations within modes I and II we can still isolate the skeleton -- the 'pure type' -- of both orientations. Those frameworks provide the touchstones for 'neo,' 'post,' 'radical,' 'orthodox,' etc. mode I and II orientations. So it is with Marx. By limiting ourselves in this chapter to the most basic components of his world view, we are constructing a third 'pure type' mode of inquiry. The subsequent emergence of dichotomies and contradictions within that mode must wait until the next chapter.

(ii) Sources

A second consideration, which follows directly from the first, concerns the possible problematic of equating 'Marxism' with the collected works of Marx and Engels. To avoid such problems we will not only restrict ourselves to primary sources, but those sources themselves will be allowed to emphasize only one principle author. In this respect our intention and method is precisely that of Melvin Rader:

> My intent is to examine what Marx said and not to rely on secondary sources. I have been wary even in citing Engels, his close friend and occasional collaborator. Aware that their opinions were not identical, Marx objected to lumping the ideas of Engels with his. "What is so very strange," he remarked about a contemporary reviewer, "is how he treats the two of us as one: 'Marx and Engels says' etc." This 'strange' lumping together, with Lenin's ideas later dumped into the pot, has persisted down to the present day. The safest procedure is to allow Marx to speak for himself and not to put the words of others in his mouth.[3]

This does not of course mean that Engels will be ignored. What is intended, rather, is that works under his sole authorship will be treated as secondary to Marx's own, and to jointly authored, works.

(iii) Marx's Works in the Context of Modes I and II

Third, although Marx certainly did not think in terms of 'mode I and II,' we will see that his ideas can fruitfully be treated as: (1) a conscious recognition of the strengths each mode exemplifies which must be incorporated into any synthesis, (2) a conscious response to the limitations inherent in these modes of inquiry which must be overcome in any convincing synthesis, (3) finally, he sought to redefine reality; to describe its dynamics in a new form; to offer a new notion of causality; to expand both the heuristic domain of explanation and the field of reality open to investigation. Thus (1) and (2) illuminate the structure and method of the synthesis, while (3) will reveal the unique qualitative nature of that synthesis.

These points must be kept in mind throughout this exposition of Marx -- i.e. 'mode III.' Aspect (3) will unfold in natural consequence of our working through the formal categories of the Marxian synthesis -- aspects (1) and (2).

Some major considerations relevant to aspects (1) and (2) noted above are:

(a) Strengths of mode I

1. Attempts to replace unverifiable propositions with verifiable ones. This is coupled with a willingness to abandon established propositions when they are challenged by better verified ones.
2. Has a comprehensive epistemological theory based on the verifiable propositions of empiricism, resulting in an

unambiguous conception of 'knowledge.'

3. Gives clear-cut internal criteria of logic, validity, objectivity and 'truth.'
4. This results in a highly refined, concrete, methodological program for all inquiry.
5. Has a clearly delineated concept of 'explanation.'
6. Within its own delineated bounds, defends the claim that it is the single method for all 'rational inquiry.'
7. Recognizes and acknowledges its own 'limitations' -- understood as the limits of its epistemological, methodological and explanatory scope.

(b) Weaknesses of mode I

1. Flawed by a very elusive concept of causality which is always conditional upon an endless and ever more elaborate statement of 'antecedent conditions.'
2. This results in an extremely limited predictive/retrodictive capability.
3. Lacks valuational, sociological and ethical criteria: criteria of 'meaning.'

(c) Strengths of mode II

1. Has a clear concept of causality.
2. This gives rise to great predictive and retrodictive potential.
3. Squarely addresses valuational, sociological and ethical

questions: has criteria of 'meaning.'

4. Not only includes aspects of reality ignored by mode I but relationally integrates all levels of reality within a comprehensive cosmology.
5. Uses dialectical logic to explain change and process -- these are outside the scope of mode I's formal logic.

(d) Weaknesses of mode II

1. Requires an ontological 'leap of faith' in which sensory data assume the function of a dependent variable and a wholly contextual significance.
2. Is not nearly as unified a 'movement' or 'school' as mode I because of a lack of clear criteria and methods.
3. Our access to underlying reality is consequently problematic -- we have no clear epistemological rules. In consequence, mode II is without a clear methodology for the conduct of inquiry.
4. The dualism of 'phenomenal' and 'metaphysical' reality introduces a rigidly hierarchical ontological, epistemological, and ultimately sociological structuring.

Thus we again see that, in general, the 'weaknesses' of mode I become the 'strengths' of mode II and vice versa.

(iv) The Need for New Conceptual and Methodological Categories

Fourth, we will have to elucidate mode III in categories other than those utilized for modes I and II -- i.e. 'ontological presuppositions,' 'congruent epistemologies,' etc. Such categories represent precisely some of the structural aspects of the forms of thought, cognition, conceptualization and social practice which the Marxist synthesis strived to transcend. To 'see' Marx through the conceptual tool of such schema is, in fact, to mechanically reduce mode III into the categories of our first two modes.

The establishment of new conceptual and methodological categories is essential to satisfy a criterion which Marx himself would insist upon in any analysis of his work: we cannot merely summarize his concepts and method -- we must 'work through' them for ourselves. In so working through mode III, we cannot overly concentrate on specific aspects of Marx -- we must go through the basic system and develop it for ourselves as we go along. In short, we cannot 'present' mode III -- we must attempt to become Marxists ourselves as we systematically develop his thought.

The categories of analysis used in this elucidation will therefore simultaneously be analytic, structural, explanatory and heuristic. This is one of the greatest imports of mode III -- Marx is not so simple that he can be viewed from one dimension. His is a multi-dimensional and dynamic conception of reality which challenges the intellect nurtured on the relatively straight-forward formal logical categories of mode I, or the rhythmically unfolding, antithetically propelled, perfectly predictable, spiral of the

Hegelian cosmos. There is in consequence no single, foolproof, way to approach the elucidation of mode III. We can only offer one fruitful path which has at least the virtues of: an accessible starting point for discussion; a development which does not violate basic principles; illustrates Marx in contrast to our previous two modes; defines mode III in a manner which reflects the qualitative uniqueness of the Marxist synthesis; leads to a point of theoretical/practical conscientization which is recognizable as a basic objective of Marx's work; and points to its own continuing reformulation and development.

(v) In Defense of Neo-Marxist Conceptual and Analytical Frameworks

Fifth, and last, the above objectives necessitate that we establish some conceptual categories and analytic frameworks which Marx himself did not employ. As Fromm notes, Marx did not actually use, for example, the precise terms 'dialectical materialism' and 'historical materialism.'[4] Nevertheless, these categories have become wholly associated with Marx [just as, to use another example, 'noble savage' has with Rousseau]. In spite of the concession that this is a neo-Marxian development, the use of such categories is fully justifiable on two main grounds.

In the first instance, we shall document that they are neither reductionist; misdirecting; nor ahistorical. Our terms and categories do not 'simplify' Marx to the point where subtle shades of his perspective are lost; they do not change the focus or emphasis of Marx's own work; they do not 'read into' his work in retrospect anything which was not there to begin with. In the second instance, our categories serve a heuristic function not only in terms of understanding Marx himself, but facilitate the evolution of our analysis within the existent literature in the field. That is, not only is our conceptual framework true to Marx; it will also have meaning for authorities on Marx. As such, our categories and framework are not inconsistent with Marx's own development, nor are they alien to subsequent developments of Marx's ideas. We do, however, write in the trust that our approach is an innovation within established literature, one contributing to a fuller explication and comprehension of Marx's views.

We propose that mode III can be generally conceptualized in _three levels_ united within one "_structural principle_" -- all are _simultaneously_ aspects of _ontological transformation_ and _epistemological significance_. The "structural principle" which keeps us cognizant of the central fact that we are always dealing with a "differentiated and dynamic structure rather than a static unity, or at the opposite extreme, a mere heap or collection" is the principle of "_organic totality_." The three levels of ontological transformation and epistemological significance are _dialectial materialism_, _dialectial ecology_ and _historical materialism_.

Each level is, in actuality, itself a 'mode of inquiry' because each could be considered to be ontologically and epistemologically complete. Yet, the ultimate methodological import of mode III is that it is a sophisticated and complete integration of three levels within an organic totality which results in the breakthrough of what may be described as a 'meta-weltanschauung' far surpassing the combined scope and breadth of both modes I and II and of its own individual constituent levels.

To further differentiate, dialectial materialism may be conceived of as a 'mode of reaction' whose structural components are material existence and material relations. Dialectical ecology may be conceived of as a 'mode of integration' whose structural components are the means of subsistence and the relations of reproduction. Historical materialism may be conceived of as a 'mode of production' whose structural components are the means of production and social relations. Figure 3 offers a schematic presentation.[5]

DIALECTICAL MATERIALISM

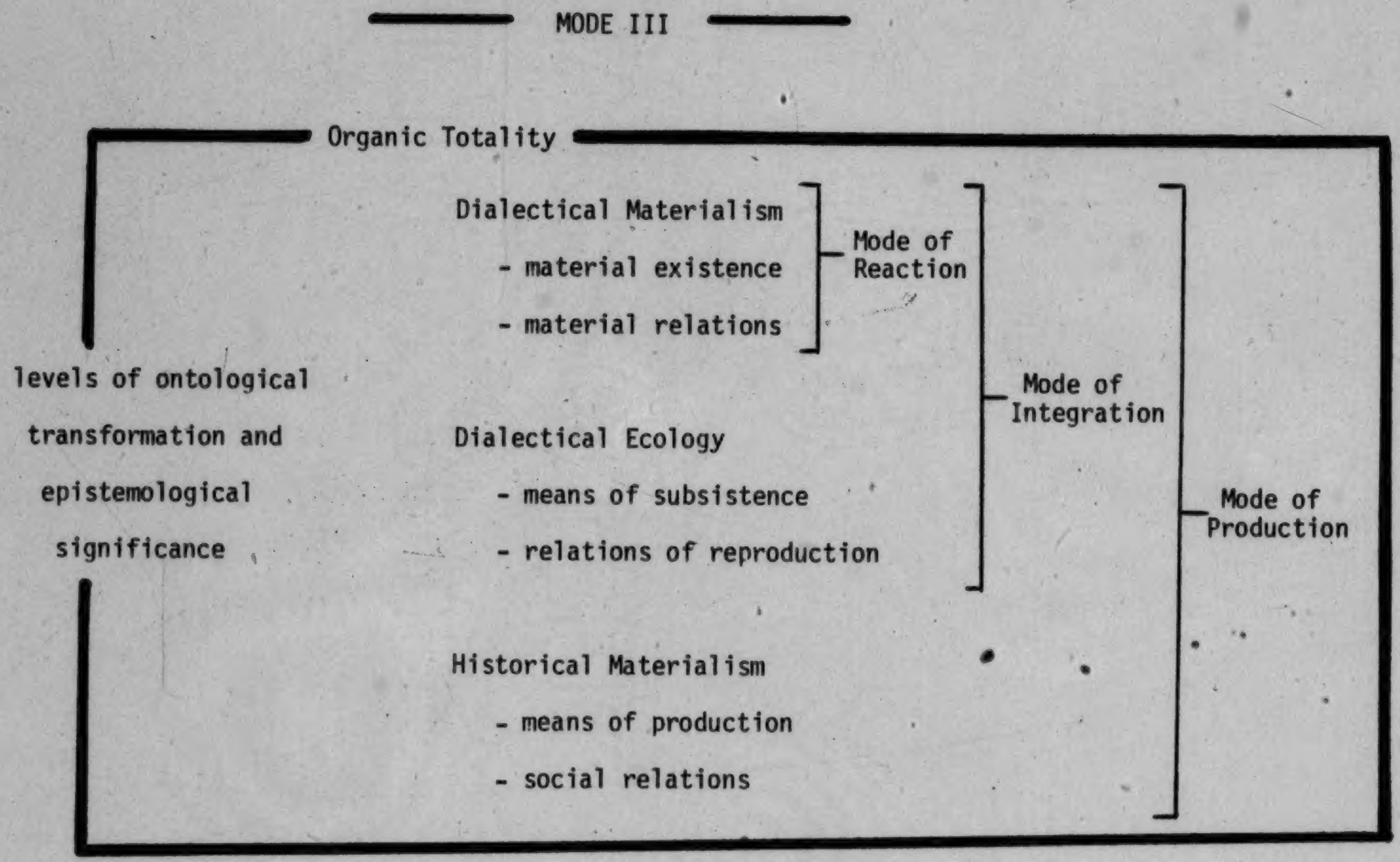
We begin our immersion into mode III with 'dialectical materialism.'[6] Here relations -- most importantly, as we shall momentarily emphasize, material relations -- assume a primary ontological import.

(i) Material Relations

Relations are of four basic types:

(1) Entities in relation to each other.
(2) Aspects of an entity in relation to each other.
(3) The whole of which (1) and (2) are constituents.
(4) Changes in (1), (2) and (3) over time.

Figure 3: Structural Components of Mode III


MODE III
Organic Totality
levels of ontological transformation and epistemological significance
Dialectical Materialism
- material existence
- material relations
Mode of Reaction
Dialectical Ecology
- means of subsistence
- relations of reproduction
Mode of Integration
Historical Materialism
- means of production
- social relations
Mode of Production

We note that (1) and (2) begin to express the imperative of 'totality.' Dialectics is here understood as the tenet that ontology is not merely a phenomenal state, but simultaneously a state of relations that phenomena exist within. Furthermore, these comprise a 'whole' -- (3) -- whose components are entities and their relations, but the whole itself possesses ontological uniqueness as it too displays characteristics (1) and (2). Thus a 'whole' cannot be conceived as merely an aggregate of its components, it must be recognized as another ontological level. Yet the existence of a whole cannot be divorced from the phenomenal and relational ontological bases of its constituents -- thus we must think in terms of an 'organic totality' which recognizes interpenetrating levels of existence which cannot automatically be reduced to their constituents without destroying a real ontological state. It is (4) which extends these relations over time, thereby extending the criterion of totality to include chronographic changes in the relational aspects constituting the ontology of the entities and the whole within which they exist.

We may now ask: first, what is the basis of relations (1), (2), and (3), and, what is the impetus behind change over time (4)? Second, what is the nature of those entities involved in such relations?

The basis of the relations entities have with each other, among elements of their own selves, and within the whole constituted by interacting entities, is 'contradiction.' The ontological primacy of existence is that an entity exists 'in opposition to' other entities. This is, emphatically, not to be confused with the ontological imperative of mode I. There entities exist as separate and distinct -- their ontology rooted in autonomy of being. In mode III, ontology is the 'tension' that entities exhibit in a sort of eternal struggle for existence.

By way of illustration, let us postulate a universe of but two atoms. At first thought, one would suppose that each atom exists autonomously. This is untrue because gravity also exists -- necessarily and simultaneously -- as one with our two atoms. 'Gravity' thus becomes illustrative of both the relational and tensive dimension of ontology in the context of basic relation (1) -- i.e. entities in relation to each other. We cannot avoid this [relational and tensive ontological] dimension even through postulation of a universe populated with but a single atom. Now 'gravity' ceases, but the elements constituting the atom are nevertheless clearly and necessarily in a 'cohesive' relation. In order for our atom to exist, to keep itself from dissipating, cohesion must at least exist between the nucleus and the electrons and between the neutrons and protons contained within the nucleus. Regardless of how far we split this one atom and descend into the ethereal world of sub-atomic particles, we are always left with an entity which cannot maintain its existence without maintaining the cohesion of its boundaries. [Indeed, contemporary physics speculates that if anything will ultimately 'lose' its discernable ontological identity through an endless process of reduction it will probably be mass -- not the energy which binds mass.] This is our second basic type of relation -- i.e. aspects of an entity in relation to each other. Importantly, we see that the relations in (2) cannot be directly reduced to type (1) relations. In the world of physics, to return to our example, science differentiates between gravitational relations -- i.e. the forces of attraction between bodies of mass -- and relations based on electrostatic forces of attraction operating within 'energy levels'[7] -- i.e. forces of cohesion at the atomic and nuclear level. Both are the same in principle -- illustrative of the relational and tensive dialectical aspect of reality -- but they are not ontologically identical. To force, for lack of better terms, an 'equivalency' into an equality of 'identity' is to ignore a real ontological level. Continuing, it is obvious that the notion of 'singleness' is meaningless here (we always have elements in relation) so we can readily see how (3) -- i.e. 'the whole' -- is always existent and its ontological basis is inseparable from (1) and (2).

Thus dialectics rejects ontology as 'essence' -- as individual, atomized, being à la mode I. Rather, ontology is 'struggle' -- relations of tension within a whole. Essence as identity is replaced with existence as contradiction. Reality 'contradicts' itself because it is always threatening to become something other than what it is at any given moment. It is always in the process of 'negating' itself -- of changing from what it 'is' to what it 'is not.' In our illustration above: gravity and energy levels show the reality of the need of a relational dimension; to separate the 'entity' from these relational dimensions is to ignore a real ontological component of the entity; the existence of the entity is really a relationship of tension, of reality as a balance of forces which provide a fleeting stability until upset. Changes in (1) -- i.e. relations of entities vis-à-vis each other -- and (2) -- i.e. internal relational aspects of an entity -- necessarily take place within (3) -- i.e. a whole -- which becomes upset, resulting in (4) -- i.e. change over time.

Most importantly, such changes are qualitative ontological changes. Such qualitative changes are not permissible within mode I as there we have a fixed notion of 'essence' as ontological base.

(ii) Material Existence

Turning now to the nature of the entities involved in (1), (2) and (3), we emphasize that dialectical ontology consists of only 'material' entities. The process of dialectical change is inherent in material nature itself, operates wholly autonomously, and yields wholly material transformations. Dialectics is 'part' of ontology in that 'relations' and 'process' cannot be separated from the material world. That is also why we labelled dialectical materialism a mode of 'reaction.' This is the level of inorganic nature; a level where the only principle of relations among entities is the comparatively simple relation of entities whose physical, immediate, and wholly unconscious dialectical existence is the whole of their being. This differentiates dialectical materialism from mode II. There, dialectics was a process 'within' nature: a 'guiding' process, the 'working through' of an imminent dialectical 'force.' This force unfolds through 'history,' hurtling toward 'realization of itself.' Material entities are the 'vehicles' for that dialectical force. This is a de facto dualism. On the one hand we have 'nature,' on the other hand the 'ordering principles' which assign the relations of material reality. This is precisely the Hegelian view.

No such dualism appears in dialectical materialism; material reality and the relations of its elements in process are one ontological entity. To argue otherwise is to confuse an ontological state with an epistemological method. In the former, dialectics is merely the innate dynamism of material reality; reality as a state of tension wherein elements are ever in a process of 'contradiction.' In the latter, dialectics is 'knowledge of nature'; both a description of the processes of material change and the cognitive apperception of the dynamics of that process. To, so to speak, infuse 'thinking' into 'reality' is to commit the cardinal error of mode II: anthropomorphization of ontology with epistemology. It is to confuse two aspects of 'dialectics.' Aspect one: dialectics 'in' nature; as a 'property' of nature. This includes the recognition that dialects is inherent in all forms of natural phenomena as well as in nature as a whole. Aspect two: dialectics 'about' nature; dialectics as 'knowledge' of nature.[8]

That is why mode III stresses that levels of ontological transformation and epistemological significance exist within an organic totality. At the basic level of dialectical materialism: (i) Dialectics as 'in nature' and dialectics as 'knowledge of nature' are ontological and epistemological realities which imply no ultimate ontological dualism. (ii) Ontological transformation is inherent in all phenomena, all ontological relations, and all the processes of nature. (iii) Epistemological significance is inherent in the processes of nature itself, requiring no 'independent' conceptual methodologies for the examination of reality. That is, epistemological method is structurally identical to ontological process.

This, however, is far from the totality of mode III. But, before going on, we cite Marx's struggle with the pivotal concept of dialectical materialism.

Two considerations must guide any attempt at a precise comprehension of Marx's concept of dialectical materialism. First, we again remind that the term itself is an imposition. As we noted, Marx never actually used that exact phrase. However, as we have also noted, this does not in any way detract from this category's utility as a tool for comprehending Marx's own continuous articulations of what he called "dialectics" and "materialism." Second, the primary focus of Marx's work was 'social' -- that is, he was concerned above all else with analysis of the human condition. To that end, his work was directed overwhelmingly to our third level of epistemological significance and ontological transformation -- historical materialism. Some writers would seize upon this to argue that what we call our first level of epistemological significance and ontological transformation would constitute, for lack of a better phrase, a sort of metaphysics of dialectical materialism which Marx would reject as pure speculation. Furthermore, because it is in fact mainly Engels who wrote on this topic, the temptation is to treat Engels as an alien element in the Marxian perspective, along with the analysis of dialectics in nature. We cite the prominent example of Melvin Rader:

> To suppose that 'the materialistic interpretation of history' implies a certain type of meta-physics, such as cosmic materialism, is a mistake. The fact that Marx was a historical materialist, in the sense of stressing the mode of production, does not commit him to a metaphysical position, such as a 'dialectical materialism' extended to embrace the whole universe. Unlike Engels he says almost nothing in his mature works about the metaphysical nature of the universe, and it is problematical to what extent he agreed with Engels. Even if he did agree, he never bothered to sketch a cosmic metaphysics, or make his agreement indubitable.[9]

The untenability of such a position becomes clear if we recall the preceding discussion on dialectics and materialism. If [to approach this issue from one direction] we admit a distinction between dialectics 'in nature' and dialectics as 'knowledge of nature' which treats the latter as merely a formal, apperceptually 'artificial' [in that it imposes a conceptual model upon, rather than accurately reflects, the object of study -- i.e. nature], conceptual tool, then we have in fact thrown open to rejection the epistemological basis of the entirety of mode III. We have cast doubt upon man's ability to know social reality because he cannot even, it is asserted, know the (presumably) simpler case of material reality. Of course, we could avoid this quandry with the assertion that Marx did [or, if he actually didn't, then he would, or could] have two ontological and epistemological positions -- one appropriate for 'nature'; the other, presumably, for 'man.' The positing of such a dualism is, in our opinion, wholly unwarranted as Marx always and explicitly speaks of his 'method' -- never 'methods.'

Marx spent a lifetime battling the contention that we cannot know the "real basis" of our existence, and it seems improbable that the bold facts of physical reality should be inaccessible to human comprehension. The great fear of writers in the vein of Rader is the belief that, if we admit a Marxian "cosmic materialism," human existence itself will become reducible to the categories of inorganic nature. The fear is that 'human ontology' would become 'physical [i.e. inorganic nature] ontology.' However, it should be obvious in view of the preceding that such a reduction could not be undertaken without a real ontological 'loss.' As we have seen in our simple illustrations using 'parts,' 'relations' and 'wholes,' even nature itself will not tolerate such reductionism without the violation of a real ontological level. We are dealing with levels of 'significance' and 'transformation'; there is no attempt here to linearly, mechanically, formally, reduce Marx to only the first level of mode III.

That there not only is but must be 'correlation' in the sense of the dialectical inter-penetration of levels of ontological transformation [i.e. nature, organisms, man in society] concurrently with dialectical inter-penetration of levels of epistemological significance [i.e. views of nature, understanding of organisms, grasp and practice of reality] is well recognized by Marx. The principle of organic totality recognizes that schisms between cosmology and social reality -- and all that falls in between -- dialectically seek their own resolution. An illustrative and concise example is to be found in the masterly use of the dialectic by Marx and Engels in their compact description of the history of "French Materialism." A sample passage:

> . . . the downfall of seventeenth-century metaphysics can be explained by the materialistic theory of the eighteenth century only in so far as this theoretical movement itself is explained by the practical nature of French life at that time. This life was turned to the immediate present, to worldly enjoyment and worldly interests, to the *earthly* world. Its anti-theological, anti-metaphysical, materialistic practice demanded corresponding anti-theological, anti-metaphysical, materialistic theories. Metaphysics had *in practice* lost all credit. Here we have only to indicate briefly the *theoretical* course of events.
>
> In the seventeenth century metaphysics (cf. Descartes, Leibniz, and others) still contained a *positive*, secular element. It made discoveries in mathematics, physics and other exact sciences which seemed to come within its scope. This semblance was done away with as early as the beginning of the eighteenth century. The positive sciences broke away from metaphysics and marked out their independent fields. The whole wealth of metaphysics now consisted only of beings of thought and heavenly things, at the very time when real beings and earthly things began to be the centre of all interest. Metaphysics had become insipid. In the very year in which Malebranche and Arnauld, the last great metaphysicians of the seventeenth century, died, *Helvetius* and *Condillac* were born.[10]

Can we therefore reasonably believe either that Marx was actually without a view on the ultimate, so to speak, 'nature of nature,' or that his view on that subject should be in any way fundamentally opposed to his other views? Both conjectures are highly improbable. Above all, we have the evidence of the subject of Marx's doctoral dissertation. There Marx recognized, and was troubled by, the failure of two thinkers to arrive at compatible existential, social, and epistemological perspectives -- in spite of both starting from compatible ontological premises.

> Apart from historical testimony, there is much other evidence for the identity of Democritean and Epicurean physics. The principles -- atoms and the void -- are indisputably the same. Only in isolated cases does there seem to be arbitrary, hence unessential, difference.
>
> However, a curious and insoluble riddle remains. Two philosophers teach exactly the same science, in exactly the same way, but -- how inconsistent! -- they stand diametrically opposed in all that concerns truth, certainty, application of this science, and all that refers to the relationship between thought and reality in general. I say that they stand diametrically opposed, and I shall now try to prove it.[11]

Marx found the solution to this in his realization that Democritus retained a merely 'metaphysical' grasp of atoms and void, while Epicurus recognized that atoms and void were "active" components which not only transcended ontological levels but were themselves epistemologically significant. Thus we have the great irony of the father of 'materialism' -- Democritus -- revealed as an ultimate 'idealist' because he was unable to successfully translate or convincingly correlate his cosmological views across what we term levels of ontological transformation and epistemological significance. As Marx concludes:

> The difference between Democritean and Epicurean philosophy of nature which we established at the end of the general section has been elaborated and confirmed in all domains of nature. In Epicurus, therefore, atomistics with all its contradictions has been carried through and completed as the natural science of self-consciousness. This self-consciousness under

> the form of abstract individuality is an absolute principle. Epicurus has thus carried atomistics to its final conclusion, which is its dissolution and conscious opposition to the universal. For Democritus, on the other hand, the atom is only the general objective expression of the empirical investigation of nature as a whole. Hence the atom remains for him a pure and abstract category, a hypothesis, the result of experience, not its active [energisches] principle. This hypothesis remains therefore without realisation, just as it plays no further part in determining the real investigation of nature.[12]

In other words -- and most significantly -- Democritus suffers from the same defect afflicting mode I. He is unable to draw any correlations between conscious and normative human activity, and 'objective' nature. The very basis of Marx's favoring of Epicurus over Democritus is that the former was able to do precisely that. [In this sense, when Marx criticizes Feuerbach and the so-called "old materialism" in his famous "Theses on Feuerbach," he is criticizing mode I: "The chief defect of all previous materialism -- that of Feuerbach included -- is that things [Gegenstand], reality, sensuousness are conceived only in the form of the object, or of contemplation, but not as human sensuous activity, practice, not subjectively."[13]] This, crucially, illustrates that 'materialism' is not 'positivism.' Only the former incorporates the imperative of recognizing correlations among ontological levels. In so doing, only the former does not lapse into treating ontology as 'speculation.' Thus materialism charges positivism with retaining merely the rhetoric that the latter deals with nature 'as it is' and life 'in the concrete.'

Thus to maintain that Marx is without a cosmology is untenable. It belies one of the centermost concerns of Marx as a young man. Nevertheless, the question of why Marx was so little concerned with, to use Engels' words, the dialectics of nature in later life remains. The answer, as our above citation from Marx's analysis of the history of French materialism reveals, centers on Marx's realization that cosmological speculation tells us more about the spectulating subject -- man -- than about the object of speculation -- the universe. Thus Marx quickly realized that the 'real' subject of materialism should be man. This does not, again, imply that there is any fundamental antipathy between the study of man and the study of nature. At the beginning of his philosophical life, as a doctoral student, such discrepancy was a foremost concern. At the close of his studies, Marx treated the existence of such compatibility as a causal observation of the obvious. For example, after a discussion in Capital on the minimum amount of money or value which is directly transferable into capital -- the amount with which a "possessor of money or commodities actually turns into a capitalist" -- Marx notes that "Here, as in natural science, is shown the correctness of the law discovered by Hegel (in his 'Logic'), that merely quantitative differences beyond a certain point pass into qualitative changes."[14]

Thus the organic totality of our levels of ontological transformation and epistemological significance were recognized by Marx from the beginning to the end of his writings. Furthermore, we have suggested that the question of the nature of the universe became secondary [but not 'alien to' nor 'in opposition to'] the material study of man. Indeed Marx seems to have recognized this even as he prepared his thesis for publication, as is illustrated in his 1841 "Draft of New Preface":

> The treatise that I herewith submit to the public is an old piece of work and was originally intended as part of a comprehensive exposition of Epicurean, Stoic, and Sceptic philosophy. [Since in the meantime political as well as philosophical work of more immediate interest prevents for the time being my finishing a complete exposition of these philosophies -- since I do not know when I shall again have the opportunity to return to this subject -- I am content to . . .]
> At present, however, political and philosophical arrangements of an entirely different kind prevent me from bringing such a task to completion.*
>
> Only now the time has come in which the systems of the Epicureans, Stoics and Sceptics can be understood. They are the philosophers of self-consciousness. These lines will at any rate show how little has so far been achieved towards solving this problem.[15]

Engels, on the other hand, retained a lifelong fascination for studying the workings of nature. Indeed, one of his last works, Ludwig Feuerbach and the Outcome of Classical German Philosophy, concerns itself with a concise, but comprehensive, exposition of all levels of ontological transformation and epistemological significance from Marx's perspective.[16] As the editor's "Preface" notes, the work covers "The essence and tasks of philosophy, the essence of materialism, the critique of mechanical materialism, the essence of the dialectical method, the dialectical-materialist theory of cognition, the materialist conception of history, the origin of ideologies, including that of religion, the significance of ethical norms, etc. . . ."[17] Some concise, directly relevant, illustrations on how our key notion of dialectical materialism must be understood within an organic unity encompassing inter-penetrating levels of ontological transformation and epistemological significance:

> [Materialism] resolved to comprehend the real world -- nature and history -- just as it presents itself to everyone who approaches it free from pre-conceived idealist fancies. [Marx] decided relentlessly to sacrifice every idealist fancy which could not be brought into harmony with the facts conceived in their own and not in a fantastic connection. And materialism means nothing more than this. But here [in Marx] the materialistic outlook was taken really seriously for the first time and was carried through consistently -- at least in its basic features -- in all domains of knowledge.[18]

> [Dialectics is] the science of the general laws of motion -- both of the external world and of human thought -- two sets of laws which are identical in substance, but differ in their expression in so far as the human mind can apply them consciously, while in nature and also up to now for the most part in human history, these laws assert themselves unconsciously in the form of external necessity in the midst of an endless series of seeming accidents.[19]

> Thanks to these three great discoveries [of the cell as the basis of more complex life forms and as capable of change; of the law of conservation of energy; and Darwin's theory of evolution] and the other immense advances in natural science, we now have arrived at the point where we can demonstrate as a whole the processes in nature not only in particular spheres but also in the interconnection of these particular spheres themselves, and so can present in an approximately systematic form a comprehensive view of the interconnection in nature by means of the facts provided by empirical natural science itself. To furnish this comprehensive view was formerly the task of so-called natural philosophy. It could do this only by putting in place of the real but as yet unknown interconnections ideal and imaginary ones, . . . Today, when one needs to comprehend the results of natural scientific investigation only dialectically, that is, in the sense of their own inter-connections, in order to arrive at a 'system of nature' sufficient for our time; . . . today this natural philosophy is finally disposed of. . . .

> But what is true of nature, which is hereby recognized as an historical process of development, is also true of the history of society in all its branches and of the totality of all sciences which occupy themselves with things human (and divine).[20]

In conclusion, we may recognize our first level of ontological transformation and epistemological significance as one aspect of an organic totality which must never be considered as isolated from other levels. Dialectical materialism appears in all of our three levels, in that the claim is consistently defended that: (a) all of reality is material, (b) all of reality exhibits dialectical relations, (c) we can truly 'know' reality only through dialectics. For heuristic purposes, we have chosen to label our first level 'dialectical materialism,' but both as component and process it is integral to all other levels. In our first level, we have merely emphasized it in one dominant form -- inorganic nature. This is merely a function of recognizing that Marx always demanded 'proof' for the reality of both 'dialectics' and 'materialism,' and one place to look is inorganic nature. Engels often chose to examine nature from the standpoint of natural science in the quest of such proof. For example, in an 1858 letter to Marx he is enthusiastic about "the progress made by the natural sciences in the last thirty years." Most significant is the establishment of the law of transformation of energy. Why? -- "is this not a splendid material proof of the way in which the determinations of reflexion are resolved into one another?"[21]

Indeed it does appear to be 'splendid proof,' but Marx also wrestled with the mysteries of inorganic nature in another, more time honored way -- in the footsteps of the great material philosophers. Democritus, Epicurus, Lucretius, Gassendi, etc. -- all are recognized in Marx's doctoral dissertation. That dissertation was equally a quest to ascertain that dialectical materialism was not but another idealistic fancy -- to prove that nature herself embodied dialectical materialism. These two orientations -- Engels' natural science and Marx's material philosophy -- were quite different in approach (one primarily rational, the other primarily empirical), but they concerned themselves with the same object -- 'nature' -- and the same objective -- ascertaining the ontological and epistemological reality of dialectical materialism. But many 'splendid proofs' of dialectical materialism are needed, and inorganic nature provides only one ground. Marx quickly turned to other grounds -- specifically our third level of 'historical materialism' -- while Engels not only shared this concern of Marx's but always managed to retain his fascination for the contributions (i.e. 'proofs') which inorganic nature was willing to provide for dialectical materialism.[22] Nevertheless, emphatically, again, dialectical materialism exists at all of our three levels. As Marx, summarily and unequivocally, asserts:

> . . . my method of development is not Hegelian since I am a materialist and Hegel is an idealist. Hegel's dialectics is the basic form of all dialectics, but only after it has been stripped of its mystical form, and it is precisely this which distinguishes my method.[23]

Dialectical materialism sought to 'strip' dialectics of its metaphysical form at all levels of existence. Dialectics also recognizes the organic totality of nature, and therefore dialectical materialism exists -- although it is transformed ontologically and assumes qualitatively unique epistemological significance -- at each level. Such ontological and epistemological 'compatibility' within the organic unity characterizing the powerful and expansive meta-weltanschauung of Marxism was never questioned by Marx. Rather, as was perhaps to be expected, he took it to be a commonplace, a matter of course. We indulge ourselves in but one final illustration of this -- an exchange of correspondence between Marx and Engels.

Engels writes:

> Have read Hofmann [Introduction to Modern Chemistry]. The more recent chemical theory, with all its faults, is a great advance on the former atomic one. The molecule as the smallest part of matter capable of independent existence is a perfectly rational category, a 'node,' as Hegel put it, in the infinite series of divisions, which does not conclude them but establishes a qualitative difference. The atom -- formerly represented as the limit of divisibility -- is now nothing more than a relation, . . .[24]

Marx replies:

> You are quite right about Hofmann. You will also see from the conclusion of my Chapter III [of Capital], where the transformation of the handicraft-master into a capitalist -- as a result of merely quantitative changes -- is touched upon, that in that text I refer to Hegel's discovery -- the law of merely quantitative changes turning into qualitative changes -- as holding good alike in history and natural science.[25]

That dialectical materialism should be overwhelmingly treated as significant only in its social form -- i.e. 'historical materialism,' our third level -- is a distortion of Marxism and a reduction of mode III to something less than it is: a grasp of reality and existence in all forms; a world-view demonstratively more expansive, sophisticated and penetrating than both mode I and mode II.

DIALECTICAL ECOLOGY

To continue our analysis of how mode III embodies levels of ontological transformation and epistemological significance within the cohesion of an organic totality, we may next consider the more complex existential level of advanced mammals.[26] Here, all of the preceding discussion on dialectical materialism will apply, however both ontological form and epistemological significance now exist within a qualitatively new context. Whereas the existential level of dialectical materialism is the level of 'simple' ordering relations among 'physically inert' interacting entities, the existential level of dialectical ecology is a level of 'complex' ordering relations among 'biologically active' interacting entities.

This is not a differentiation in terms of mere 'complexity'; it is a qualitative difference. Here, dialectical materialism still exists and applies, but in a unique and transformed form and manner. Above all, whereas our first level illustrated how existence is both perpetuated and changed, in dialectical ecology the focus is the maintenance and evolution of life.

We label dialectical ecology a 'mode of integration' because 'activity' takes place at this level. This is not the case in our first level, where purely material bodies existed within a universe which was marked above all by the perfectly regular interactions of inorganic entities following merely the laws of physical matter. The interactive notion of 'activity' recognizes a fundamental distinction between -- but not mutual exclusion of -- the dialectical interactions taking place at these two levels.

(i) Means of Subsistence

Life must actively seek the means of its physical continuation, thus animals' biological constitutions include what we may crudely call an 'intuition' to seek the perpetuation of their physical existence (search for food, avoidance of enemies, migration, etc.). Already, we can see how this observation greatly complicates the comparatively simpler case of dialectical materialism. In that instance, existence was its own condition -- entities did not need to undertake any, for lack of a better term, 'directed struggle' to maintain their ontological form. True, any particular form of existence was possible only through the maintenance of a 'balance of forces.' However when such a balance -- through the aforementioned principle of contradiction -- became upset and any given entity qualitatively changed into another, that qualitative change was within the parameters of one ontological level: inorganic matter. In other words, inorganic entities changed into other inorganic entities. However when organic entities [in this case, higher mammals] undergo a sufficiently 'traumatic' qualitative change in the form of 'death,' then they not only undergo a qualitative change but there is a change in ontological levels. They lose the ontological quality of 'activity' -- their ontology becomes wholly that of our first level. Simultaneously, a level of epistemological significance is lost as the now 'inorganic' entity can be understood without need of incorporating its 'active' qualities.[27]

In short, an ontological and epistemological basis of organic life becomes lost. Organic life, like inorganic existence, is, crucially, still dialectical and still material. But dialectics now not only includes the mere physical, chemical, electrical, etc. processes which animals (because they are made of matter) incorporate, but now includes the 'activity' of the organism as it mediates itself with its environment to maintain its ontological component of life. Thus animals selectively take food from the environment and they differentially protect themselves from the elements and other animals. In other words, the dialectical relationship of creature with environment is not, for lack of a better term, 'blind.' 'Life' is an ontological reality [demanding a corresponding epistemological transformation] which mediates between the organic entity and the inorganic environment. This is, again, not to say that the mediation is not 'dialectical.' Neither is it to imply that either life or the environment are not 'material.' Under no circumstances do we insinuate that mode III views life as a 'metaphysical' reality.[28] However, mode III recognizes that dialectical ecology -- the dialectical interaction of organic entity with its inorganic and organic environment to preserve the ontological trait of 'life' -- requires that: (1) we recognize a new ontological level, (2) that new ontological level both illustrates the principles of and can only be understood within the epistemological framework of, a 'mode of integration.' The necessity of this is even more dramatically illustrated by the fact that 'relations of reproduction' constitute yet another dimension of dialectical ecology.

(ii) Relations of Reproduction

In the case of inorganic matter, we have noted that qualitative change takes place within the bounds of our first level. Thus, for example, the law of transformation of energy -- which was considered to be very significant in the eyes of Marx and Engels -- becomes one 'epistemological tool' to recognize both that qualitative changes do occur, yet a 'real' (i.e. material) ontological basis (i.e. 'energy') remains intact. (Such laws are epistemological tools in that they contain both an 'objective' and 'cognitive' element. That is, mode III's search for fully 'dialectical' laws of nature -- of which the law of transformation of energy [mistakenly, as we shall later emphasize] was thought to be an example -- yields new descriptions of 'objective' nature. The recognition of such laws as dialectical laws becomes an epistemological act and method. Thus the 'objective' [dialectical] workings of 'nature' were seen to be 'correspondent to' the [dialectical] workings of the human 'mind,' thereby 'proving' the reality and universality [i.e. found in 'nature' and 'human cognition'] of dialectical materialism.)

At the level of dialectical ecology, however, the dialectical transformations can, at a critical point, result in the loss of an ontological level. To ensure that transformations stay within permissible bounds presents a problem: obviously the individual active unit (the 'live' entity) will eventually 'perish' (i.e. lose an ontological level and assume the ontological status of our first level). Thus the dialectical processes of maintaining the individual unit (i.e. 'means of subsistence') are not sufficient to maintain the existence of the second level itself. (i.e. If all organisms die, then the only level of reality is our first one.) Therefore dialectical ecology must include a dimension for preservation of itself as a structural component within our organic totality.

Such a dimension we label the 'relations of reproduction.' Here it is recognized that life not only involves the survival of an individual unit, but simultaneously involves the maintenance of the species. Individual organic entities perish (lose an ontological level) but 'life' maintains itself across time. Thus the epistemological significance of the means of subsistence is to be found in the comprehension that this is a continuation of individual existence -- existence in the 'short run' -- through the dialectical-ecological process of selecting from the environment those necessary materials by which individual units survive. The epistemological significance of the relations of reproduction [mating patterns, protection of young, abandonment of 'unfit' offspring, teaching the young survival skills, etc.] is to be found in the comprehension that this is a continuation of life as a more general category -- i.e. existence in the 'long run' -- through the dialectical-ecological process of adapting to an ever-changing environment to allow the continuation of the species. [Of course, the further organic unity of the means of subsistence and relations of reproduction is obvious: both must be 'compatible' as both are necessary for the continued structural existence of the mode of integration as a qualitatively identifiable level of ontological transformation and epistemological significance.]

With the recognition that relations of reproduction necessarily entail a transgenerational dimension, we have introduced an ontological and epistemological dimension which clearly is not existent in our first level. While inorganic interactions obviously may have a 'pattern' over time -- i.e. there is a transtemporal dimension -- they cannot be said to show an 'evolution.'[29] The very language and concepts of biological ontology entail the notion of generations adapting and changing over time. In inorganic nature, any use of the concept of 'generation' is wholly metaphorical and anthropomorphic. With the notion of adaptation, we clearly have a unique temporal dimension which recognizes an ontological uniqueness. This correspondingly demands a new form of comprehension for its understanding. In Darwin, we find the basis for a conceptual framework to grasp the uniqueness of what might be called the 'organic dialectic.' [However, this is certainly not to imply that there is any neo-Hegelian element of 'consciousness' or 'design' here. Even as Darwin recognized, evolution is a 'reactive' concept -- organic entities respond to environmental change.] 'Dialectical materialism' recognized the dynamics of inorganic identity and change. 'Mode of integration' maintains organic unity by integrating dialectical materialism into another level characterized by individual organic existence (means of subsistence) and species perpetuation (relations of reproduction) which form a new structural component we term 'dialectical ecology' -- another ontological/epistemological level.

Dialectical ecology forms a sort of 'stepping stone' in the comprehension of Marx's views at all ontological and epistemological levels. While both man and animal are constituted of inorganic matter, neither can be mechanically reduced to inorganic matter. While man and animal share characteristics, the human ontological level cannot be reduced to the animal ontological level. (Consciousness in the form of productive activity, as we shall momentarily see, is the intervening variable.) At the level of dialectical ecology the perpetuation of immediate life and life across generations is the distinguishing characteristic: "The whole character of a species -- its species-character -- is contained in the character of its life activity"; "The animal is immediately one with its life activity. It does not distinguish itself from it. It is *its life activity*"; "an animal only produces what it immediately needs for itself or its young. It produces one-sidedly, . . . It produces only under the dominion of immediate physical need, . . . An animal's product belongs immediately to its physical body, . . . An animal forms objects only in accordance with the standard and the need of the species to which it belongs, . . ."[30]

However, as in the case of dialectical materialism, Marx did not dwell long on this ontological and epistemological level. This is evident even in the more romantic speculations of Marx the young man: "Nature herself has determined the sphere of activity in which the animal should move, and it peacefully moves within that sphere, without attempting to go beyond it, without even an inkling of any other."[31] These opening lines of Reflections of a Young Man on the Choice of a Profession are immediately rejected as a program for human existence. And, four years later, Marx summarily asserts that "If a philosopher does not find it outrageous to consider man an animal, he cannot be made to understand anything."[32]

The true subject of human contemplation and activity is, again, human existence. Again, it is to this subject that Marx quickly turned and devoted his energy. Again, as in the case of his studies in the natural sciences, Engels paid much more attention to the level of dialectical ecology than Marx did. It was Engels who tried to articulate precisely the subtle qualitative differences between the levels of dialectical ecology and the mode of production, between animal and human existence, and it is he who tried to outline the precise processes through which the qualitative, evolutionary, transformation of animal to man historically occurred. His 1876 essay "The Part Played by Labor in the Transition from Ape to Man"[33] has assumed the status of a classic. However, we may follow Marx's example and press on to our next level of ontological transformation and epistemological significance. The subject, none-the-less, will not be abandoned as we will continue to discuss Marx's views on dialectical ecology as a component of historical materialism. We now address how dialectical ecology [and, necessarily -- because mode III's levels form an organic totality -- dialectical materialism] is an integral, necessary, component of historical materialism. [It is not of course a sufficient component, as historical materialism cannot be reduced to dialectical ecology without loss of (an) ontological and epistemological level(s).]

HISTORICAL MATERIALISM

At the ontological and epistemological level of historical materialism -- the level of human existence -- we do not lose, but retain in a cumulative, qualitatively new, form all of the elements of the previous levels.

First, as both Engels and Marx clearly recognize, life itself demands that the means of subsistence and relations of reproduction remain imperative. Consider:

> According to the materialist conception, the determining factor in history is, in the final instance, the production and reproduction of immediate life. This, again, is of a twofold character: on the one side, the production of the means of existence, of food, clothing and shelter and the tools necessary for that production; on the other side, the production of human beings themselves, the propagation of the species.[34]

Engels' above view is clearly compatible with Marx's -- not only is it one of Engels' last works, but a work which utilized Marx's so-called "Ethnological Notebooks."[35] Marx expresses precisely the same thought elsewhere:

> . . . the first premise of all human existence and, therefore, of all history, the premise, namely that men must be in a position to live in order to be able to 'make history.' But life involves before everything else eating and drinking, a habitation, clothing and many other things. The first historical act is thus the production of material life itself.[36]

And,

> The third circumstance which, from the very outset, enters into historical development, is that men, who daily remake their own life, begin to make other men, to propagate their kind: the relation between man and woman, parents and children, the family.[37]

Even the above brief comments illustrate how the basic principles discussed under the framework of dialectical ecology remain, yet become transformed, in our third level. It is true that men engage in relations of reproduction and secure their means of subsistence, but all this takes place in a qualitatively new context. Above used terms like "in history" and "production," for example, are inseparable from the human means of subsistence and relations of reproduction; this was not the case in our second level. As Marx states:

> Men can be distinguished from animals by consciousness, by religion, or anything else you like. They themselves begin to distinguish themselves from animals as soon as they begin to produce their means of subsistence, . . .[38]

Such production is not merely perpetuation of life:

> The way in which men produce their means of subsistence depends first of all on the nature of the actual means of subsistence they find in existence and have to reproduce. This mode of production must not be considered simply as being the production of the physical existence of the individuals. Rather it is a definite form of activity of these individuals, a definite form

> of expressing their life, a definite mode of life on their part.[39]

Stated comparatively, more complexly, and in expanded form:

> In creating a world of objects by his practical activity, in his work upon inorganic nature, man proves himself a conscious species-being, . . . Admittedly animals also produce. They build themselves nests, dwellings, like the bees, beavers, ants, etc. But an animal only produces what it immediately needs for itself or its young. It produces one-sidedly, whilst man produces universally. It produces only under the dominion of immediate physical need, whilst man produces even when he is free from physical need and only truly produces in freedom therefrom. An animal produces only itself, whilst man reproduces the whole of nature. An animal's product belongs immediately to its physical body, whilst man freely confronts his product. An animal forms objects only in accordance with the standard and need of the species to which it belongs, whilst man knows how to produce in accordance with the standard of every species, and knows how to apply everywhere the inherent standard to the object. Man therefore also forms objects in accordance with the laws of beauty. It is just in his work upon the objective world, therefore, that man really proves himself to be a species being.[40]

Nevertheless, the principle of organic totality precludes an absolute ontological split between man and the rest of the world (i.e. the ontological/epistemological levels of dialectical ecology and dialectical materialism). Consider:

> The life of the species, both in man and in animals, consists physically in the fact that man (like the animal) lives on inorganic nature; and the more universal man (or the animal) is, the more universal is the sphere of inorganic nature on which he lives. Just as plants, animals, stones, air, light, etc. constitute theoretically a part of human consciousness, partly as objects of natural science, partly as objects of art -- his spiritual inorganic nature, spiritual nourishment which he must first prepare to make palatable and digestible -- so also in the realm of practice they

> constitute a part of human life and human activity. Physically man lives only on these products of nature, whether they appear in the form of food, heating, clothes, a dwelling, etc. The universality of man appears in practice precisely in the universality which makes all nature his *inorganic* body -- both inasmuch as nature is (1) his direct means of life, and (2) the material, the object, and the instrument of his life activity. Nature is man's *inorganic body* -- nature, that is, insofar as it is not itself human body. Man *lives* on nature -- means that nature is his *body*, with which he must remain in continuous interchange if he is not to die. That man's physical and spiritual life is linked to nature means simply that nature is linked to itself, for man is part of nature.[41]

Put another way, recognizing man's ontologically unique species being in no way justifies the positing of an absolute autonomy of 'man' from the dialectical/material realities of the mode of reaction exhibited in 'inorganic nature.' In like manner, man is not autonomous from the dialectical/ecological contingencies of the mode of integration.

> *Man* is directly a *natural being*. As a natural being and as a living natural being he is on the one hand endowed with *natural powers, vital powers* -- he is an *active* natural being. These forces exist in him as tendencies and abilities -- as *instincts*. On the other hand, as a natural, corporeal, sensuous, objective being he is a *suffering*, conditioned and limited creature, like animals and plants.[42]

However, of course:

> But man is not merely a natural being: he is a *human* natural being.[43]

The condition and creation of such consciousness is, of course, itself dialectical:

> The animal is immediately identical with its life-activity. It does not distinguish itself from it. It is *its life activity*. Man makes

> his life activity itself the object of his will and of his consciousness. He has conscious life activity. It is not a determination with which he directly merges. Conscious life activity distinguishes man immediately from animal life activity. It is just because of this that he is a species-being. Or it is only because he is a species being that he is a conscious being, i.e. that his own life is an object for him. Only because of that is his activity free activity.[44]

The distinguishing characteristic of the dialectic of the mode of production is that it is also a social dialectic. Production necessarily involves a social dimension. Thus the family is not only a unit to ensure propagation, it is also "to begin with . . . the only social relationship."[45] This reveals the unique dialectical aspect of human existence:

> The production of life, both of one's own labour and of fresh life in procreation, now appears as a double relationship: on the one hand as a natural, on the other hand as a social relationship.[46]

Stated from another perspective, and negatively:

> Certainly eating, drinking, procreating, etc. are also genuinely human functions. But taken abstractly, separated from the sphere of all other human activity and turned into sole ultimate ends, they are animal functions.[47]

The uniqueness of the dialectic of the human condition is to be found in this 'social' dimension -- which is itself inseparable from 'consciousness'; which is separate from the 'awareness' (so to speak) that animals have of the world.

> Where there exists a relationship, it exists for me: the animal does not enter into 'relations' with anything, it does not enter into any relation at all. For the animal, its relation to others does not exist as a relation. Consciousness is, therefore, from the very beginning a social product, and remains so as long as men exist at all.[48]

Simultaneously, all aspects of the above are wholly material:

> The premises from which we begin are not arbitrary ones, not dogmas, but real premises from which abstractions can only be made in the imagination. They are the real individuals, their activity and the material conditions under which they live, both those which they find already existing and those produced by their activity. These premises can thus be verified in a purely empirical way.[49]

Furthermore -- and much more ambitious and illustrative of how the mode of production incorporates and transforms the material bases and dialectical processes and methods of the mode of integration and the mode of reaction -- the eventual synthesis of all levels within one framework firmly rooted in a dialectical and material epistemological/ontological method and base becomes possible. For, "to assume one basis for life and a different basis for science is as a matter of course a lie."[50] Ultimately: "Natural science will in time incorporate into itself the science of man, just as the science of man will incorporate into itself natural science: there will be one science."[51]

Even the above brief overview illustrates how, in our third level: (1) existence is 'material,' (2) relations are 'dialectical,' (3) immediate life is based on securing subsistence and (4) life itself is continued through reproduction. Yet (1) to (4) are wholly transformed in this level because: (a) the ontological basis of human life is not 'mere' matter nor is it the 'blind,' 'instinctual,' integration of a biological organism with its environment to preserve 'life.' Rather, something called 'production' becomes the unique ontological characteristic of the human condition. (b) This condition demands that 'human' epistemology recognize that human dialectical relations are not merely the simple interactions of inorganic materials nor the more profound biological interactions of life perpetuating itself over generations. Rather, human dialects are the dialectics of 'social' life and must be investigated and understood as such. We will see that it is only in the context of the dialectical interaction of productive means and social relations that we get 'history.' The framework within which the dialectic of the means of production and social relations takes place to result in 'historical change' is the mode of production. Of course, there is dialectical interaction within both the means of production and social relations, as well as between each. Furthermore the mode of production, because it recognizes the organic totality of our three levels, recognizes the continual dialectical unity of all three levels.

Before continuing with a detailed examination of the structural components of historical materialism, we precis the above.

First, we encompassed the inter and intra-dialectical relations of the means of production and social relations within the category of 'history.' 'History' is a category employed to illustrate how, in mode III, we must incorporate elements qualitatively beyond (but incorporating, of course) the transtemporal and transgenerational qualities of existence found respectively in the mode of reaction and the mode of integration in order to grasp the uniqueness of the mode of production.

Second, humanity's unique ontological characteristic we have noted to be a capacity for 'production.' Human dialectical relations are unique because they are 'social' (therefore this relational factor must assume epistemological prominence). Both production and social interaction are realizations of *potential*[52] because both *presuppose* a *conscious* entity. Consciousness is a *necessary* condition for both productive activity and social relations.

Third, because man is a conscious species being he is not merely a *reactive* being; he is also an *en*active entity. Humanity does more than merely *maintain* its existence *within* *one* material, transtemporal, existential level (dialectical materialism); it does more than merely *perpetuate* its existence *across* *generations* (dialectical ecology). Mankind is capable of not only under*going* but also under*taking* changes across time and across generations; changes *within* the very *necessary condition of its own species being*. *Consciousness* is capable of *qualitative change*; therefore *mankind's* very *species being* is capable of undergoing qualitative change. The medium within which such change takes place is 'history' (therefore the dialectical relations and material bases of the mode of production is *'historical* materialism').

Fourth, both the objective and the subjective organic unity of ontological and epistemological expressions of production, social relations and consciousness are manifest in '*labour*'. Just as the mode of reaction is a mode of 'existence' and the mode of integration a mode of 'activity,' the mode of production is a mode of 'labour.' Just as 'existence' and 'activity' were meta-concepts capturing the complexity of their respective levels of ontological transformation and epistemological significance, 'labour' similarly encompasses the mode of production. The complexity of man is such that productive activity, social relations, consciousness and history are all simultaneously ontological, epistemological, material and dialectical categories.

(i) Means of Production

We must stress that the structural components of historical materialism are so inter-penetrative that any full separation, even for purposes of analytic exposition, is not possible. Consider:

> The human being is in the most literal sense a [political animal], not merely a gregarious animal, but an animal which can individuate itself only in the midst of society. Production by an isolated individual outside society -- a rare exception which may well occur when a civilized person in whom the social forces are already dynamically present is cast by accident into the wilderness -- is as much of an absurdity as is the development of language without individuals living together and talking to each other.[53]

Furthermore, the need to recognize that all these dialectically inter-penetrating relations and components are wholly material cannot be over-emphasized. Witness the very opening sentence of the Grundrisse: "The object before us, to begin with, material production."[54]

The means of production is itself comprised of two components: the physical instruments of production and attendant, necessary, relations of production. As Marx asserts:

> In the social production of their existence, men invariably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production.[55]

The existence of an instrument of production is a necessary condition of production. As Marx notes: "No production possible without an instrument of production, even if this instrument is only the hand."[56] Such instruments can take many forms -- from the hand, to simple tools, to the massive factories and plants of modern industry. If the form of the instrument is not important (at this point) in our discussion, the 'social context' of the instrument is most relevant. As we have just seen, "in the social production of their existence, men invariably enter into definite relations, which are independent of their will, . . ." Importantly, "the totality of these relations of production constitute the economic structure of society, . . ."[57]

In other words, in the act of production -- necessarily, we have seen, a social act -- the instruments of production necessitate a 'co-existing' organizational structure in order for production to take place. The significance of this is reinforced if we remember that all human activity is 'productive.' For example, even the simplest case of man reproducing life -- both immediate life and life across generations -- takes place within the organizational form of the family. (Here man's use of man's own body -- whether for the gathering or killing of food, or the physical act of reproduction -- is the instrument of reproduction. Recall: "no production possible without an instrument of production even if this instrument is only the hand.").

However, at this point, we are at the verge of the fallacy of merely translating one category into another, without identifying precisely what activity the act of production embodies. Production must be the production of some thing in some way. It is here that the concept of 'labor' comes in.

We asserted earlier that the mode of production may be considered a mode of 'labour' -- in the same way the mode of integration may be considered a mode of 'activity,' and the mode of reaction a mode of 'existence.' The notion of labour serves such a pivotal role in that: first, labour clearly recognizes the uniqueness of man as a conscious entity:

> We pre-suppose labour is a form that stamps it as exclusively human. A spider conducts operations that resemble those of a weaver, and a bee puts to shame many an architect in the construction of her cells. But what distinguishes the worst architect from the best of bees is this, that the architect raises his structure in imagination before he erects it in reality. At the end of every labour-process we get a result that already existed in the imagination of the labourer at its commencement.[58]

Second, labour, because it has what Marx often refers to as a "dual nature," clearly illustrates how the natural condition of man 'in general' must simultaneously be comprehended in its 'specific' social form.

> As useful activity directed to the appropriation of natural factors in one form or another, labour is a natural condition of human existence, a condition of material interchange between man and nature, quite independent of the form of society. On the other hand, the labour which posits exchange-value is a specific social form of labour. For example, tailoring if one considers its physical aspect as a

> distinct productive activity produces a coat, but not the exchange-value of the coat. The exchange-value is produced by it not as tailoring as such but as abstract universal labour, and this belongs to a social framework not devised by the tailor.[59]

However although labour in both its general and specific forms is (as we shall stress momentarily) a fully material entity [i.e., it is not a hypothetical construct divorced from reality], our interest is primarily in the specific social forms it manifests. As Marx, after a detailed exposition of labour's general nature, eloquently hits the point home:

> The labour-process, resolved as above into its simple elementary factors, is human action with a view to the production of use-values, appropriation of natural substances to human requirements; it is the necessary condition for effecting exchange of matter between man and Nature; it is the everlasting Nature -- imposed condition of human existence, and therefore is independent of every social phase of that existence, or rather is common to every such phase. It was, therefore, not necessary to represent our labourer in connection with other labourers; man and his labour on one side, Nature and its materials on the other, sufficed. As the taste of the porridge does not tell you who gave the oats, no more does this simple process tell you of itself what are the social conditions under which it is taking place, whether under the slave-owner's brutal lash, or the anxious eye of the capitalist, whether Cincinnatus carries it on in tilling his modest farm or a savage in killing wild animals with stones.[60]

Labour is necessarily social not only because man uses instruments to labour: "the use and fabrication of instruments of labour, although existing in the germ among certain species of animals, is specifically characteristic of the human labour-process, . . ."[61] ["An instrument of labour is a thing, or complex of things, which the labourer interposes between himself and the subject of his labour, and which serves as the conductor of his activity."[62]] Labour is indicative of the 'mode of production' as a 'mode of labour' because the concept and activity of labour simultaneously: (a) encompasses the subject, object and process of production; (b) is a fully material category which is both general and specific; (c) provides empirical criteria to measure the dialectical relations and exchanges within the mode of production; (d) offers an explanation for the dialectical interactions of the means of production. To expand points (a) through (d):

(a) We have noted how production is a distinctly human activity. The form of such activity is 'labouring': man is the labouring (producing) subject; nature -- i.e., physical, material, entities -- are the objects of labour (production); instruments are the implements (means) of labour (production).

(b) Further, because of the imperative of dialectical materialism, we must recognize that man as a 'labouring' or 'productive' creature cannot be so posited merely in an abstract sense -- in the sense of labour or production as 'human essence.' The general notion of production must comprise specific, contextual, forms of production.

Labour fully satisfies this criteria. Its material products are the "products of social activity, the result of expended human energy, materialized labour."[63] Labour is, and can be represented to be, simultaneously general [i.e., "abstract"] material and concrete [i.e., social specific] material:

> Productive activity, if we leave out of sight its special form, vis., the useful character of the labour, is nothing but the expenditure of human labour-power. Tailoring and weaving, those qualitatively different productive activities, are each a productive expenditure of human brains, nerves, and muscles, and in this sense are human labour. They are but two different modes of expending human labour-power. Of course, this labour-power, which remains the same under all its modifications, must have attained a certain pitch of development before it can be expended in a multiplicity of modes. But the value of a commodity represents human labour in the abstract, the expenditure of human labour in general.[64]

This dualism is dialectical ". . . concrete labour becomes the form under which its opposite, abstract human labour, manifests itself."[65]

(c) As a result of the encompassing nature of labour, we are provided with an empirical basis for measuring the dialectical exchanges within the mode of production. Both 'general' and 'concrete' labour are measures of human productive activity, and the measure of that unique human activity is embodied in 'value.'

> Let us now consider the residue of each of these products; it consists of the same unsubstantial reality in each, a mere congelation of homogeneous human labour, of labour-power expended without regard to the mode of its expenditure. All that these things now tell us is, that human labour-power has been expended in their production, that human labour is embodied in them. When looked at as crystals of this social substance, common to them all, they are -- values.[66]

The dual nature of labour, and labour as an embodiment of 'value,' was greatly emphasized by Marx. In writing Engels on August 21, 1867 he asserts (in speaking of Vol. I of Capital):

> . . . The best points in my book are: 1) the two-fold character of labour, according to whether it is expressed in use value or exchange value. (All

> understanding of the facts depends upon this.) It is emphasized immediately, in the *first* chapter; 2) the treatment of *surplus value independently of its particular* forms as profit, interest, ground rent, etc. This will come out especially in the second volume.[67]

In order to grasp the important distinction between use-value and exchange-value, we cite at length Marx's clear exposition in *Capital*:

> The utility of a thing makes a use-value. But this utility is not a thing of air. Being limited by the physical properties of the commodity, it has no existence apart from that commodity. A commodity, such as iron, corn, or a diamond, is therefore, so far as it is a material thing, a use-value, something useful. This property of a commodity is independent of the amount of labour required to appropriate its useful qualities. When treating of use-value, we always assume to be dealing with definite quantities, such as dozens of watches, yards of linen, or tons of iron. The use-values of commodities furnish the material for a special study, that of the commercial knowledge of commodities. Use-values become a reality only by use or consumption: they also constitute the substance of all wealth, whatever may be the social form of that wealth. In the form of society we are about to consider, they are, in addition, the material depositories of exchange-value.
>
> Exchange-value, at first sight, presents itself as a quantitative relation, as the proportion in which values in use of one sort are exchanged for those of another sort, a relation constantly changing with time and place. Hence exchange-value appears to be something accidental and purely relative, and consequently an intrinsic value, i.e., an exchange-value that is inseparably connected with, inherent in commodities, seems a contradiction in terms. Let us consider the matter a little more closely.
>
> A given commodity, e.g., a quarter of what is exchanged for x blacking, y silk, or z gold, &c. -- in short, for other commodities in the most different proportions. Instead of one exchange-value, the wheat has, therefore, a great many. But since x blacking, y silk, or z gold, &c., each represents the exchange-value, or one quarter of what, x blacking, y silk,

> z gold, &c., must, as exchange values, be replaceable by each other, or equal to each other. Therefore, first: the valid exchange-values of a given commodity express something equal; secondly, exchange-value, generally, is only the mode of expression, the phenomenal form, of something contained in it, yet distinguishable from it.
>
> Let us take two commodities, e.g., corn and iron. The proportions in which they are exchangeable whatever those proportions may be, can always be represented by an equation in which a given quantity of corn is equated to some quantity of iron: e.g., 1 quarter corn = 1 cwt. iron. What does this equation tell us? It tells us that in two different things -- in 1 quarter of corn and x cwt. of iron, there exists in equal quantities something common to both. The two things must therefore be equal to a third, which in itself is neither the one nor the other. Each of them so far as it is exchange-value, must therefore be reducible to this third.
>
> . . .
>
> This common "something" cannot be either a geometrical, a chemical, or any other natural property of commodities. Such properties claim our attention only in so far as they affect the utility of those commodities, make them use-values. But the exchange of commodities is evidently an act characterized by a total abstraction from use-value. Then one use-value is just as good as nother, provided only it be present in sufficient quantity. . . . As use-values, commodities are, above all, of different qualities but as exchange-values they are merely different quantities, and consequently do not contain an atom of use-value.
>
> If then we leave out of consideration the use-value of commodities they have only one common property left, that of being products of labour.[68]

The necessary relation of value and labour is clear. This provides us with a quantifiable entity -- labour -- which is a constituent of all productive activity and the products of that activity:

> A use-value, or useful article, therefore, has value only because human labour in the abstract has been embodied or materialized in it. How, then, is the magnitude of this value to be measured? Plainly, by the quantity of the value-creating substance, the labour, contained in the article. The quantity of labour, however, is measured by its duration, and labour-time in its turn finds its standard in weeks, days, and hours.[69]

(d) However, if the above has served to illustrate both the form and substance of human production and how that form and substance can be grasped, we must again return to the basic issue of how the means of production necessarily involve a dialectical interpretation of instruments of production and relations of production. The key to resolution of this issue is the recognition that, although production and labour can be expressed as universal values, the labour which produces the actual products which embody these values must take a specific form. Production necessitates instruments of production; the specific form of instrument has as its own necessary condition a specific relation of production. As Marx notes:

> An instrument of labour is a thing, or a complex of things, which the labourer interposes between himself and the subject of his labour, and which serves as the conductor of his activity. He makes use of the mechanical, physical, and chemical properties of some substances in order to make other substances subservient to his aims. Leaving out of consideration such ready-made means of subsistence as fruits, in gathering which a man's own limbs serve as the instruments of his labour, the first thing of which the labourer possesses himself is not the subject of labour but its instrument. Thus Nature becomes one of the organs of his activity, one that he annexes to his own bodily organs, adding stature to himself in spite of the Bible. As the earth is his original larder, so too it is his original tool house. It supplies him, for instance, with stones for throwing, grinding, pressing, cutting, &c. The

> earth itself is an instrument of labour, but when used as such in agriculture implies a whole series of other instruments and a comparatively high development of labour. No sooner does labour undergo the least development, than it requires specially prepared instruments. Thus in the oldest caves we find stone implements and weapons. In the earliest period of human history domesticated animals, i.e., animals which have been bred for the purpose, and have undergone modifications by means of labour, play the chief part as instruments of labour along with specially prepared stones, wood, bones, and shells. . . . Relics of bygone instruments of labour possess the same importance for the investigation of extinct economic forms of society, as do fossil bones for the determination of extinct species of animals. It is not the articles made, but how they are made, and by what instruments, that enables us to distinguish different economic epochs.[70]

The above example illustrates how there are obvious, necessary, attendant relations of production which any given instrument of production gives rise to. Thus the introduction of domestic animals necessitates the tending of these animals. This is a relation of production which the instrument of production necessitates. In precisely the same manner, in a modern factory the machines themselves -- as instruments of production -- cannot be considered in isolation from the relations of production. Without the social dimension involved in the co-ordination of time-tables, the ensuring of deliveries of raw materials, the training of workers even before they actually operate a machine in the plant, etc., etc., the instrument of production is not even capable of functioning. But instruments of production do function, and this is because the relations and instruments of production work in 'harmony' -- they are compatible, thereby facilitating the efficiency of the means of production.

However, we know this is not always the case. We know, for example, that the factory's machinery does not replace itself -- it must be replaced through the decisions of men. The timing of such decisions, and their specific form, affects the relative efficiency of one factory vis-à-vis others. Part and parcel of the factory as a productive entity is the fact that the wages of the workers become a factor in considering the availability of capital for changes in machinery. Any changes which may affect total factory employment may meet with the resistance of the workers. If a factory gets too 'top-heavy' with managers, technicians, etc., productivity may fall because of increased 'bureaucratic' obstructions, etc.

This gives rise to the question of whether or not these are fundamental problems which cannot be contained. The answer is negative. We know that management can be replaced or upgraded; we know that salaries can be re-adjusted or re-negotiated; we know that workers can be transferred to other plants so they will not lose their jobs, etc. Thus, what we may term 'technical' -- i.e. purely administrative and service -- problems which are a part of any means of production are not critical ones. They can be worked out.

But we must see beyond such superficial compatible relations. Such compatibility would be the whole of the matter only if the instruments of production had a unilateral effect upon the relations of production. This is not the case because we cannot reduce the means of production to 'technology.' The role of technology is decidedly limited, and to make it less than so is to ignore the holistic reality of the means of production. As Marx states:

> If there is no production in general, then there is also no general production. Production is always a particular branch of production -- e.g., agriculture, cattle-raising, manufacturing, etc., -- or it is a totality. But political economy is not technology.[71]

The technological component [i.e., the actual instruments of production] has to be so limited because inherent in the division and method of labour which instruments of production necessitate are also the historically conditioned property relations embodied in the instruments of production. Such property relations cannot be wholly explained by looking only to the instrument of production. They are, rather, an integral component of the means of production in that they are relations of production which affect the very manner in which specific means of production operate. Property relations must be understood as a component of the means of production which are inherently 'social' and which condition the form of the mode of production. This is because property relations ultimately give us the specific context in which labour occurs [remembering, that labour "in general" and production "in general" are mere abstractions unless they are expressed in their specific manifestations].

In other words, to return to Marx's own terminology, we must pay close attention to the fact that "It is not the articles made, but how they are made, and by what instruments . . ." that is crucial. Importantly, we must remember that the actual varieties of truly unique modes of production is extremely limited. [The modern era -- coming into full bloom with the Industrial Revolution -- is characterized as an era of 'Capitalist' production.] All instruments and relations of production -- and their compatible and antagonist dialectical interactions -- can be comprehended from a single framework. That framework is found in the specific form productive labour assumes, and the specific manner in which labour is appropriated.

To illustrate: at perhaps the simplest levels imaginable, primitive men had only their hands and the most fundamental tools with which to eek out their existence. Material circumstances dictated that: hunting and gathering be the form of productivity; the division of labour was along lines of sex and strength; men directly appropriated all of the products of their labour as it was a full-time endeavour to merely stay alive and procreate. Today, the situation has changed drastically. The instruments of production are no longer stones and clubs but massive factories. The division of labour is not biological but 'technological.' Men do not directly appropriate the products of their labour but rather exchange their labour for products.

In between these two ages we have a development of the manner in which labour is appropriated -- from what may be called 'direct' to 'indirect' appropriation. Remembering that products embody 'value,' we can assume men began to produce enough of a particular product to satisfy their own needs (direct appropriation) of the product as well as producing more to 'exchange' for other products they may need or desire. These exchange values were bartered on the market. However, with the production of value (i.e. goods) over and above the direct needs of the individual, and with the 'specialization' of productivity, we can see the possibility of appropriation of labour by others. That is, the basis of value being labour, men can exchange their labour (the 'value' embodied in the product they made) for something else (another product, which also embodies 'value'). If the value of what any product is exchanged for is more than the real value of that product (i.e. the amount of labour-time the product encompasses), then our shrewd bargainer has, literally, appropriated some value. His exchange has allowed him to appropriate, without labouring, a product which is more valuable (contains more labour) than the product he actually produced. The difference we may call 'surplus-value.' (Of course, precisely the same amount of value is 'lost' by the person he bartered with -- as that person now has a product which is less valuable than his original product.)

Virtually all of Marx's 'mature' (economic) works consist of a detailed, painstaking, exposition of the dynamics of the unique manner in which one, socially specific, mode of production -- 'Capitalism' -- appropriates surplus value. The mechanics of this appropriation are based on the premises:

(a) Labour is the only source of value.

> A use-value, or useful article, therefore, has value only because human labour in the abstract has been embodied or materialized in it.[72]

Of course, 'labour' is an activity which necessitates raw materials of production. Therefore: "It would be wrong to say that labour which produces use-values is the only source of wealth produced by it, that is, of material wealth. Since labour is an activity which adopts material for some purpose or other, it needs material as a prerequisite."[73] Also, the manner of appropriation is most important -- as the appearance of 'commodities' is what makes appropriation possible. Thus the only seemingly paradoxical statement: "A thing can be a use-value, without having value. This is the case whenever its utility to man is not due to labour. Such are air, virgin soil, natural meadows, etc. A thing can be useful, and the product of human labour, without being a commodity. Whoever directly satisfies his wants with the produce of his own labour, creates, indeed, use-values but not commodities. In order to produce the latter, he must not only produce use values, but use-values for others, social use-values. Lastly, nothing can have value, without being an object of utility. If a thing is useless, so is the labour contained in it; the labour does not count as labour, and therefore creates no value."[74]

(b) 'Labour-power,' because it is inherent in the human condition, is seen to be the 'possession' of the individual. It is even more than a possession, as that term implies (to the modern mind) the notion of 'property.' Such a twisted notion of possession is itself a consequence of the real social/economic relations of modern society as

> property turns out to be the right, on the part of the capitalist, to appropriate the unpaid labour of others or its products, and to be the impossibility, on the part of the labourer, of appropriating his own product.[75]

Labour as the 'possession' of the individual labourer is rather to be understood as the act of production, the constitution of man's very being. Because man is necessarily a social being, because production necessarily involves a social dimension, there is no a priori or necessary conflict between individual production, social production, individual appropriation of the products of one's labour and society's appropriation of products of labour. There is no such absolutely necessary, inherent, conflict between man and society, instruments of production and relations of production.

> For an example of labour in common or directly associated labour, we have no occasion to go back to that spontaneously developed form which we find on the threshold of the history of all civilised races. We have one close at hand in the patriarchal industries of a peasant family, that produces corn, cattle, yarn, linen, and clothing for home use. These different articles are, as regards the family, so many products of its labour, but as between themselves, they are not commodities. The different kinds of labour, such as tillage, cattle tending, spinning, weaving and making clothes, which result in the various products, are in themselves, and such as they are, direct social functions, because functions of the family, which, just as much as a society based on the production of commodities, possesses a spontaneously developed system of division of labour. The distribution of the work within the family, and the regulation of the labour-time of the several members, depend as well upon differences of age and sex as upon natural conditions varying with the seasons. The labour-power of each individual, by its very nature, operates in this case merely as a definite portion of the whole labour-power of the family, and therefore, the measure of the expenditure of individual labour-power by its duration, appears here by its very nature as a social character of their labour.
>
> Let us now picture to ourselves, by way of change, a community of free individuals, carrying on their work with the means of production in common, in which the labour-power of all the different individuals is consciously applied as the combined labour-power of the

> community. [All labour here is characterized by being] . . . social, instead of individual. . . . The total product of our community is a social product. One portion serves as fresh means of production and remains social. But another portion is consumed by the members as means of subsistence. A distribution of this portion amongst them is consequently necessary. The mode of this distribution will vary with the productive organisation of the community, and the degree of historical development attained by the producers. We will assume, but merely for the sake of a parallel with the production of commodities, that the share of each individual producer in the means of subsistence is determined by his labour-time. Labour-time would, in that case, play a double part. Its apportionment in accordance with a definite social plan maintains the proper proportion between the different kinds of work to be done and the various wants of the community. On the other hand, it also serves as a measure of the portion of the common labour borne by each individual, and of his share in the part of the total product destined for individual consumption. The social relations of the individual producers, with regard both to their labour and to its products, are in this case perfectly simple and intelligible, and that with regard not only to production but also to distribution.[76]

The economic equation of labour with labour-power and labour-power with 'property' results in the notion of "wealth" as the "theft of others' labour time"; but "real wealth is the developed productive force of all individuals."[77] Labour as 'commodity' ignores the reality of labour as production of man's -- i.e. both mankind and individual men -- very species being. It is "estrangement" of man from the 'production' (process) and 'products' (results) of his labour that results in man's "alienation" from his very being; it is the translation of labour -- which is the embodiment of all value -- into a mere commodity which is the final and pitiful form of human debasement; it is to return man to the spirit of the state of affairs of 'primitive communism' -- a reality wherein production and appropriation of labour was simultaneously direct and social -- that characterizes the drive of men toward a future communism where

> nobody has one exclusive sphere of activity but each can become accomplished in any branch he wishes, society regulates the general production and thus makes it possible for me to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, rear cattle in the evening, criticize after dinner, just as I have a mind, without even becoming hunter, fisherman, shepherd or critic.[78]

The estrangement of modern man is all-pervasive; it is total:

> The savage in his cave -- a natural element which freely offers itself for his use and protection -- feels himself no more a stranger, or rather feels as much at home as a _fish_ in water. But the cellar dwelling of the poor man is a hostile element, "a dwelling which remains an alien power and only gives itself up to him insofar as he gives up to it his own blood and sweat" -- a dwelling which he cannot regard as his own hearth -- where he might at last exclaim: "Here I am at home" -- but where instead he finds himself in _someone else's_ house, in the house of a _stranger_ who always watches him and throws him out if he does not pay his rent. He is also aware of the contrast in quality between his dwelling and a human dwelling that stands in the _other_ world, in the heaven of wealth.
>
> Estrangement is manifested not only in the fact that _my_ means of life belong to _someone else_, that which _I_ desire is the inaccessible possession of _another_, but also in the fact that everything is itself something _different_ from itself -- that my activity is _something else_ and that, finally (and this applies also to the capitalist), all is under [the sway] of _inhuman_ power.[79]

(c) The above makes sense only with realization that something uniquely human -- labour -- is rapidly becoming embodied in non-human forms. Surplus-value is being 'stored' as 'capital', ". . . capital being accumulated labour."[80] It appears in two forms:

> That part of capital then, which is represented by the means of production, by the raw material, auxiliary material and the instruments of labour, does not, in the process of production, undergo any qualitative alteration of value. I therefore call it the constant part of capital, or, more shortly, constant capital.
>
> On the other hand, that part of capital, represented by labour-power, does, in the process of production, undergo an alteration of value. It both reproduces the equivalent of its own value, and also produces an excess, a surplus-value, which may itself vary, may be more or less according to circumstances. That part of capital is continually being transformed from a constant into a variable magnitude. I therefore call it the variable part of capital, or, shortly, variable capital. The same elements of capital which, from the point of view of the labour process, present themselves respectively as the objective and subjective factors, as means of production and labour-power, present themselves, from the point of view of the process of creating surplus-value, as constant and variable capital.[81]

Specifically, there is a "tendency" for constant capital to increase in the form of machinery. "The machine proper is therefore a mechanism that, after being set in motion, performs with its tools the same operations that were formerly done by the workman with similar tools. . . . From the moment that the tool proper is taken from man, and fitted into a mechanism, a machine takes the place of a mere implement. The difference strikes one at once, . . . The number of tools that a machine can bring into play simultaneously, is from the very first emancipated from the organic limits that hedge in the tools of the handscraftman."[82] Machinery gives "free scope" to capital's "constant tendency" as machines are "the most powerful means for increasing the productiveness of labour -- i.e., for shortening the working time required in the production of a commodity, . . ."[83]

(d) It also readily follows that because only labour is the source of value there is, and always has been, constant competition to appropriate the labour of others. Capitalism itself -- as a distinct mode of production -- is unique only in that, as Mandel states:

> The capitalist mode of production is the first mode of production, the first form of social organization, in which capital is not limited to the role of an intermediary and exploiter of noncapitalist forms of production, of small-scale commodity production. In the capitalist mode of production, capital takes over the means of production and penetrates directly into production itself.[84]

"Capital is far older than the capitalist mode of production" because capital is merely "a value which is increased by a surplus value, [and it matters not] whether this occurs in the course of commodity circulation, . . . or in production, as is the case in the capitalist system. Capital, . . . exists not only in capitalist society but in any society founded on small-scale commodity production as well. For this reason it is necessary to distinguish very clearly between the life of capital and that of the capitalist mode of production, of capitalist society."[85]

Of course that which is appropriated is 'surplus-value' -- which itself is defined as 'value' only because it embodies human labour -- and therefore the mode of production is seen to be simultaneously a mode of appropriation. This is but the dialectically reverse side of the same coin, and

> The essential difference between the various economic forms of society, between, for instance, a society based on slave labour, and one based on wage-labour,

> lies only in the mode in which this surplus labour is in each case extracted from the actual producer, the labourer.[86]

(3) It is also readily following that "the history of all hitherto existing society is the history of class struggles."[87] Throughout history, we can distinguish the struggles of some to appropriate the surplus-labour of others, and the struggle of those so exploited to regain the full value of their own labour.

However, at a very early stage of human history -- in an age of what is described by Engels as "primitive Communistic society,"[88] -- there was full appropriation of the products of labour within, as we have noted, an order wherein there were no dichotomies between individual production and labour, individual appropriation of the products of labour, social production and labour, and social appropriation of labour. Only with the production of surplus-value do we get the possibility of its appropriation. Only with the dissolution of the antagonistic relations within the capitalist mode of production, characterized by the perversion of labour and production from what they are -- the expression and creation of man's very being -- to what they have become -- mere 'property' -- will the final dissolution of class struggle be achieved in a future "Communistic society" where the appropriation of surplus-value by some to the detriment of others cease. More will be said of this in the next chapter.

In summary, we may perceive the following major dialectical inter-relations of the structural components [i.e. instruments of production and relations of production] of the means of production.

(a) There are 'compatible' relations between the instruments and relations of production in that any instrument of production has, as a necessary, co-existent, dimension, specific relations of production. The instrument of production [a modern factory, for example] will simply not work unless relations of production are 'in harmony' with the machinery and facilitate efficiency [i.e. a factory requires servicing of machinery, raw materials must be supplied, workers must be trained, shifts must be co-ordinated, etc.] These are 'managerial' or 'functional' concerns which, although sometimes difficult, are essentially problems to be solved and do not put 'stress' on the system -- they promote harmony.

(b) However, this assumes that the relations inherent in the means of production are only 'adaptive' ones -- i.e. because the instruments of production require compatible relations of production, men must 'adapt' to the instruments. This is a naive view as inherent in the means of production is also a specific form of appropriation of surplus-value (surplus-labour). Today, the characteristic mode of appropriation is called 'capitalism.' As we have seen, capitalism has a "tendency" toward "constant capital." This is an 'antagonistic' relation wherein the instruments of production [through the capitalist] actually appropriate the labour of those who labour.

(c) Therefore, the net overall tendency of the means of production under capitalism is to exhibit an antagonistic relation. Ironically, the very relations which we described as 'compatible' are actually contributing, in the long-run, to this antagonistic relation. The degree to which the capitalistic instruments of production are able to find 'harmonious' relations of production is the degree to which the appropriation of surplus-labour is accelerated. That is, machinery requires relations of production to include all manner of co-ordination of men and supplies. The degree to which men and supplies are co-ordinated is the degree to which machines appropriate surplus-labour and the degree to which antagonistic relations of production -- unemployment, strikes, vandalism, etc. -- will increase.

(ii) Social Relations

From the preceding analysis we can readily, and quickly, comprehend the second structural component of historical materialism. Corresponding to the compatible and antagonistic relations of the means of production are compatible and antagonistic social relations. By 'social relations' we mean "the general process of social, political and intellectual life."[89] The very same interactions take place at his level of reality -- the "ideological forms," the "legal, political, religious, artistic or philosophic" forms[90] -- as at the level of the means of production. These "forms" are the conscious forms of human existence -- the level of conscious, social, intercourse. The means of production is the 'deep structure' (for lack of a better term) which constitutes the fundamental, necessary, inescapable casting of man's species being -- his specific manner of productive labouring -- while social relations comprise man's conscious, 'idealized,' grasp of this being and its actual practice in day-to-day life. The means of production is the material base -- the 'infrastructure' -- upon which the intellectual, conscious, practice of life -- the "superstructure" -- is founded. Of course, the superstructure is also material in that it is based upon concrete reality -- i.e., the infrastructure. (In the same way, as we noted, 'universal labour' is not an idealistic abstraction as it is based upon 'specific labour.') Thus, we may comprehend this concise summary of Marx on the basic tenets of his views:

> In the social production of their existence, men inevitably enter into definite relations, which are independent of their will, namely relations of production appropriate to a given stage in the development of their material forces of production. The totality of these forces of production constitutes the economic structure of society, the real foundation, on which arises a legal and political superstructure and to which correspond definite forms of social consciousness. The mode of production of material life conditions the general process of social, political and intellectual life. It is not the consciousness of men that determines their existence, but their social existence that determines their consciousness.91

The compatibility between base and superstructure is complete, thus the actual material basis of human consciousness -- i.e., the specific means of production -- is fully complemented in the intellectual, existential, expressions of human consciousness -- i.e., the specific social/intellectual practices and ideas of men. This point cannot be overstressed:

> The fact is, . . . that definite individuals who are productively active in a definite way enter into . . . definite social and political relations. Empirical observation must in each separate instance bring out empirically, and without any mystification and speculation, the connection of the social and political structure

> with production. The social structure and the State are continually evolving out of the life-process of definite individuals, but of individuals, not as they may appear in their own or other people's imagination, but as they really are; i.e., as they operate, produce materially, and hence as they work under definite material limits, presuppositions and conditions independent of their will.
>
> The production of ideas, of conceptions, of consciousness, is at first directly interwoven with the material activity and the material intercourse of men, the language of real life. Conceiving, thinking, the mental intercourse of men, appear at this stage as the direct efflux of their material behaviour. The same applies to mental production as expressed in the language of politics, laws, morality, religion, metaphysics, etc. of a people. Men are the producers of their conceptions, ideas, etc. -- real, active men, as they are conditioned by a definite development of their productive forces and of the intercourse corresponding to these, up to its furthest forms. Consciousness can never be anything else than conscious existence, and the existence of men is their actual life-process. . . .
>
> . . . We set out from real, active men, and on the basis of their real life-process we demonstrate the development of the ideological reflexes and echoes of this life-process. The phantoms formed in the human brain are also, necessarily, sublimates of their material life-process, which is empirically verifiable and bound to material premises. Morality, religion, metaphysics, all the rest of ideology and their corresponding forms of consciousness, thus no longer retain the semblance of independence. They have no history, no development; but men, developing their material production and their material intercourse, alter, along with this their real existence, their thinking and the products of their thinking. Life is not determined by consciousness, but consciousness by life.[92]

To expand upon the above summary: as in the means of production, we may identify two basic structural components within social relations. As in the means of production, both components are inseparable -- i.e. each is a necessary condition of the other. As in the means of production, one structural component is 'material' in the more 'physical' sense of the term, while the other is 'material' in the sense of embodying the actual, lived, social dimension of the means of production. (i.e. The 'instruments' of production are 'things,' objects possessing mass, and therefore we chose to call them more physical, while the relations of production are just that, relations, and this social dimension does not possess mass like a physical object. Of course, this distinction is purely a heuristic tool: both the instruments and relations of production are fully material.) Corresponding to these two slightly different emphases are the formal -- i.e. 'ideology' -- and informal -- i.e. 'social mores' -- structural components of social relations.

The formal component of social relations is the highest level of abstraction at which the 'reality' of man and the cosmos is stated. It is the level of formal exposition of 'models,' of 'concepts,' of 'theories,' etc. It is the level of physical and social 'science,' of 'theology,' of 'philosophy,' etc.

The correlation between the 'formal' structural component of social relations and the means of production is that the former is a 'translation,' so to speak, of the reality of man's existence into the languages of abstract categories. Thus the 'hard sciences' readily find corresponding, material, expression in the instruments of production in the form of engineering, physics, mechanics, etc. while psychology, sociology, business administration, etc. become the most abstract conceptualizations of the relations of production. 'Theology' becomes the study of 'cosmology,' of 'first principles,' of 'natural order,' as well as the study of 'duty,' of 'conduct,' of 'sin,' etc. 'Philosophy' becomes the study of 'man,' of 'human nature,' of 'principles of thought,' as well as the study of 'ethics,' of 'justice,' etc.

The above examples are employed to illustrate one key point: mankind and human activity seem to have an 'objective,' so to speak, dimension which provides a sort of 'basis of the human condition.' 'Beneath' the 'existential,' day to day, usually very trivial concerns and activities of men (i.e. the level of 'social mores') there lies a deeper reality which is the stable basis of our existence. The expression of that perceived stable basis is found in the formal structural dimension of 'social relations.' Yet, we have labeled this formal dimension 'ideological.' The reason lies in the realization that any description of the human condition can take place only within the framework of the specific means of production men find themselves within. The 'form' of consciousness is the 'form' of production men engage in. Thus the formal theories men extrapolate on the nature of the universe and of man are necessarily 'blinded,' so to speak, by the gestalt which the means of production impose upon human comprehension and expression.

Thus what at first appear to be descriptions of 'objective reality' (i.e. formal scientific, theological, philosophical, etc. theories) turn out to be, in actuality, descriptions of merely one peculiar reality -- a reality structured by and perceived through the consciousness corresponding to particular forms of production. It is this which makes them 'ideological' -- they are only relatively accurate descriptions, but they are cast in the form of 'objective,' 'absolute,' models.

[This is, first, in many ways merely to restate that Marx had a 'cosmology.' Thus, for example, he recognized that even 'hard,' 'pure,' 'natural' science does not exist in a vacuum. It is not an 'independent' intellectual pursuit, but must be understood as ultimately 'conditioned' by human reality. As Engels notes, in an 1894 letter to Starkenburg, the "entire technique of production" must be included within "economic relations, which we regard as the determining basis of the history of society." And,

> If, as you say, technique largely depends on the state of science, science depends far more still on the state and the requirements of technique. If society has a technical need, that helps science forward more than ten universities. The whole of hydrostatics (Torricelli, etc.) was called forth by the necessity for regulating mountain streams of Italy in the sixteenth and seventeenth centuries. We have known anything reasonable about electricity only since its technical applicability was discovered. But unfortunately it has become the custom in Germany to write the history of the sciences as if they had fallen from the skies.93

In recognizing that none of our formal intellectual concepts and methods 'fall from the sky,' we recognize that [as Marx succinctly asserts] "Even . . . 'pure' natural science is provided with an aim, as with its material, only through trade and industry, through the sensuous activity of men."[94] It is also to restate that it is ultimately the 'nature of man' that is to provide the key to the various pictures of the 'nature of total reality.' As we have seen, this human nature is an 'economic' nature -- man as a producing, labouring, entity.]

The 'informal' structural component of social relations -- that of 'social mores' -- is simply the existential expression of the formal. The entire sphere of the day-to-day activities of men is based upon the values which men have been socialized into. Just as the relations of production corresponded to the instruments of production, social mores correspond to the formal, ideological, articulations of 'reality.' This is simply to say that men do not need to explicitly rationalize reality to act within such reality.

We may, however, note some important distinctions within the term 'social.' We recognize, for example, that a social dimension is inherent in both the means of production and social relations. Yet, there is an ontological and epistemological distinction. The structural components of the means of production are actual, necessary, and basic. They embody relations at the level of formation of consciousness. The components of social relations are equally actual, necessary and basic, but they embody relations at the level of grasping consciousness, of the existential awareness of living and acting. One cannot be understood without the other, one cannot exist without the other; but the term 'social,' as it appears in the means of production and in social relations, must be understood in these different emphases. Because man is a conscious being, we must draw such an ontological and epistemological distinction to avoid unwarranted reductionism.

The virtue of the preceding is that it clearly emphasizes the material basis of social reality. But it is simplistic because it covers up the true nature of the correspondence of the inter and intra-relations of the infra and superstructure. That is, if there were both 'compatible' and 'antagonistic' dialectical inter-relations within the means of production, then we suspect there should be corresponding compatible and antagonistic inter-relations at the level of social relations. This is in fact the case: while some social practices and ideas correspond to the compatible relations within the means of production, other practices and ideas correspond to the antagonistic relations inherent in the means of production. In the vocabulary of the dialectic, social relations simultaneously provide both the affirmation and negation of the means of production.

To use our previous examples: while physical and social science maximizes the efficiency of the means of production (through engineering, mechanical, etc. improvements, and through the formulation of management principles, improving personnel efficiency, etc.), it also brings on its own problems by furthering unemployment through mechanization, increasing alienation through increasing specialization, etc. More striking yet, science provides the very tools to make people aware of the contradictions of their existence -- i.e. sociologists begin to 'scientifically' document declines in standards of living and increases in crime, they chart the increasing profits of major capitalists, etc. These are, as we shall see in the next chapter, comparatively minor contradictions which science -- as a 'formal' and 'rational' articulation of reality -- is contributing to social relations and thereby to the means of production. Similarily, while theology has been well documented to facilitate the harmony of the means of production by inculcating virtues of honesty, punctuality, obedience, etc. into workers, it also ironically stimulates a rejection of worldly goods, it provides a moral basis for outrage at the accumulation of vast amounts of capital by some at the expense of others (an accumulation which can be 'scientifically' documented, as we noted), and it can provide a justification for the punishment of those who 'exploit' their fellow man in factories, etc. Similarily, philosophy and social science simultaneously facilitate social relations corresponding to the means of production, as well as providing the rational and empirical documentation of its failings. Indeed, Marx was the first to constantly admit that the development of philosophy and social science before him contained not only the recipe for the success of the capitalist mode of production, but also the seeds of its own destruction.

The key to understanding this two-fold dialectical relational aspect -- compatible and antagonistic relations -- is to be found in the realization that property relations form the basis of social relations. The embodiment of labour in capital at the level of the means of production has a corresponding embodiment of property within social classes. Just as labour is the basis of production and the appropriation of labour under capitalism the basic, over-riding, contradiction inherent in capitalism, so the notion of property becomes the basic concept around which social relations are built. Of course, the property relations found under capitalism are peculiar to that mode of production. But the central point that is the particular division of labour and appropriation of labour which characterizes modes of production remains. Property relations are merely the expression of labour relations at the level of social relations. In like manner, as the appropriation of labour reveals the ultimately antagonistic relations within the means of production, property relations embody the ultimate antagonistic tendencies within social relations.

Explication of the precise nature of such property relations at the level of ideology and social mores is again essentially a matter of 'translation,' and the exercise undertaken in the previous section (to show how appropriation of labour is the fundamental antagonistic relation within the means of production under capitalism) need not be repeated. It is the structure and method of analysis which is of import, and hopefully this has been sufficiently outlined. We will however note that what may perhaps be called the 'immediacy' of the correlation between property relations and social relations can vary. For example, it is quite readily apparent how "Legislation, whether political or civil, never does more than proclaim, express in words, the will of economic relations."[95] It is in the manipulation of the apparatus of the state that class [i.e. property] relations assume their most naked form. Other correlations are equally clear. The well-documented phenomenon "that modern industry, in overturning the economic foundation on which was based the traditional family, and the labour corresponding to it, had also unloosened all traditional family ties"[96] leads to the realization that "it was the capitalist mode of exploitation which, by sweeping away the economic basis of parental authority, . . . [and] . . . by assigning as it does an important part in the process of production, outside the domestic sphere, to women, to young persons, and to children of both sexes, creates a new economic foundation for a higher form of the family and of relations between the sexes."[97] In England (which is the particular case Marx is referring to) not only the enactment of child labour laws but also the establishment of universal education, the rise of woman's consciousness, the rise of grass-roots religious movements, the expansion of philanthropic organizations and ideals, etc. all find their root in eighteenth century economic developments. Other spheres of social relations appear to be a bit more indirectly linked to property relations. These are what Engels calls "the realms of ideology which soar still higher in the air -- religion, philosophy, etc."[98] Nevertheless, the link is there, it is clear, and all these 'realms' are ultimately

> . . . under the dominating influence of economic development. In philosophy, for instance, this can most readily be proved true for the bourgeois period. Hobbes was the first modern materialist (in the eighteenth century sense) but he was an absolutist in a period when absolute monarchy was at its height throughout Europe and in England entered the lists against the people. Locke, both in religion and politics, was the child of the class compromise of 1688. The English deists and their more consistent continuators, the French materialists, were the true philosophers of the bourgeoisie, the French even of the bourgeois revolution. The German philistine runs through German philosophy from Kant to Hegel, sometimes positively and sometimes

> negatively. But as a definite sphere in the division of labour, the philosophy of every epoch presupposes certain definite thought material handed down to it by its predecessors, from which it takes its start. And that is why economically backward countries can still play first fiddle in philosophy: France in the eighteenth century as compared with England, on whose philosophy the French based themselves, and later Germany as compared with both. But in France as well as Germany philosophy and the general blossoming of literature at that time were the result of a rising economic development. I consider the ultimate supremacy of economic development established in these spheres too, but it comes to pass within the limitation imposed by the particular sphere itself: in philosophy, for instance, by the operation of economic influences (which again generally act only under political, etc. disguises) upon the existing philosophic material handed down by predecessors. Here economy creates nothing anew, but it determines the way in which the thought material found in existence is altered and further developed, and that too for the most part indirectly, for it is the political, legal and moral reflexes which exert the greatest direct influence on philosophy.
>
> About religion I have said what was most necessary in the last section on Feuerbach.99

And, to belabour the point with but one more illustration, we may perhaps cite one of Marx's comments on art:

> Sancho imagines that Raphael produced his pictures independently of the division of labour that existed in Rome at the time. If he were to compare Raphael with Leonardo da Vinci and Titian, he would know how greatly Raphael's works of art depended on the flourishing of Rome at that time, which occurred under Florentine influence, while the works of Leonardo depended on the state of things in Florence, and the works of Titian, at a later period, depended on the totally different development of Venice. Raphael as much as any other artist was determined by the technical advances in art made before him, by the organization of society and the division of labour

> in his locality, and, finally, by the division of labour in all the countries with which his locality had intercourse. Whether an individual like Raphael succeeds in developing his talent depends wholly on demand, which in turn depends on the division of labour and the conditions of human culture resulting from it.[100]

The point is, again, that property relations -- which are economic relations, which are relations based on the appropriation of labour, which are class relations, etc. -- are the basis of all other social relations and therefore social relations -- both formal (ideological) and informal (social mores) -- exhibit the same compatible and antagonistic (but ultimately antagonistic) dialectical relations as the means of production.

Figures 4 through 7 summarize the components and dialectical relations of historical materialism. The dialectical interactions are of a compatible [i.e. → ←] and antagonistic [i.e. ⟷] nature. Thus: Figure 4 schematicizes the dialectical interactions between the instruments of production and the relations of production revealing the internal dialectic of the means of production. Figure 5 sketches the internal dialectic of the social relations component of the mode of production. Social relations consist of the formal, ideological, articulation of social and material reality and the informal, experiential, living of reality in the form of social mores. Figure 6 indicates that the dialectical inter-relations of the means of production and social relations are correspondingly compatible and antagonistic as, we recall, the basis of such relations is the appropriation of labour. Figure 7 summarizes that because, under capitalism, the appropriation of labour assumes an antagonistic struggle for surplus-value, the internal relations of production and internal social relations are only superficially compatible and ultimately contradictory. Correspondingly, the dominant dialectical inter-relationship between the means of production and social relations assumes an antagonistic tendency. All relations shown to be predominantly antagonistic, the system is in a state of tension marked by 'contradiction.' Obviously, this cannot continue forever, and at some critical point the system will negate itself. Then into being will come a new means of production with corresponding new social relations. Necessarily and simultaneously, the consciousness of men -- their production and labouring assuming new form -- will change. Thus a new mode of production will replace the former (in this case, capitalism) and man's species-being will have undergone a qualitative transformation.

Figure 4: Internal Dialectic of the Means of Production

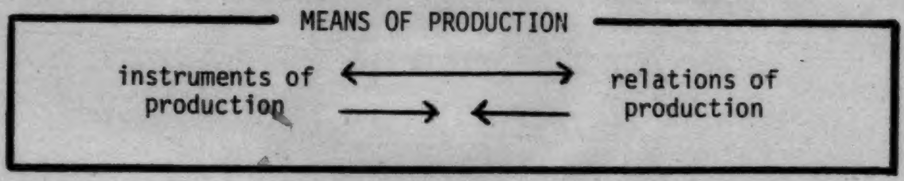

MEANS OF PRODUCTION
instruments of production
relations of production

Figure 5: Internal Dialectic of Social Relations

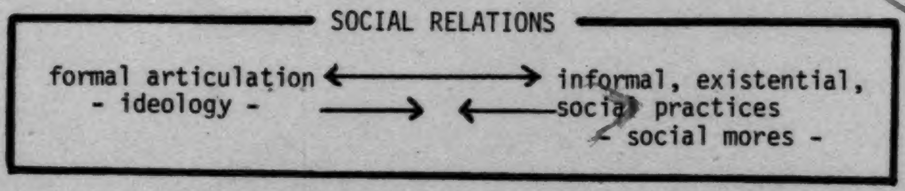

SOCIAL RELATIONS
formal articulation - ideology -
informal, existential, social practices - social mores -

Figure 6: Correspondence of Dialectical Relations Within and Between the Means of Production and Social Relations

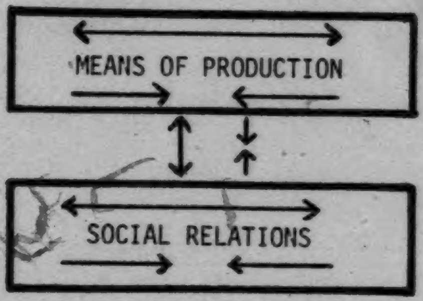
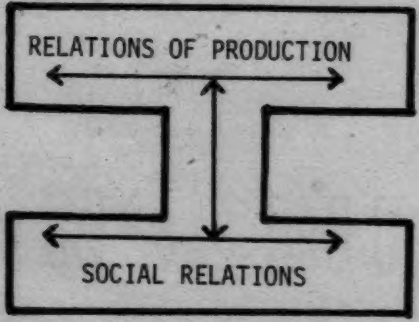

MEANS OF PRODUCTION
SOCIAL RELATIONS

Figure 7: Dialectical Inter and Intra-Relations Under Capitalism are Ultimately Contradictory


RELATIONS OF PRODUCTION
SOCIAL RELATIONS

HISTORY

The preceding facilitates understanding of how man's species-being is actually capable of qualitative change. Men, as analysis of the means of production reveals, are not born as 'abstract' men -- out of time and place. They are born, rather, as conscious, productive, labouring beings. Conscious production and labour can take place within specific productive 'circumstances' or 'contexts' -- i.e., the specific instruments and relations of production. Men, so to speak, 'inherit' their mode of production because in the necessarily social production of their very being -- productive labour -- they are confronted from birth with an existent, actual, mode of production. "All production is appropriation of nature on the part of an individual within and through a specific form of society."[101] Thus:

> Whenever we speak of production, then, what is meant is always production at a definite stage of social development -- production by social individuals. . . . However, all epochs of production have certain common traits, common characteristics. *Production in general* is an abstraction, but a *rational abstraction* in so far as it really brings out and fixes the common element as thus saves us repetition.[102]

The tenet of dialectial *materialism* helps us remember that limiting ourselves to the concept of "production in general" would be to revert to idealism. The concept of production is admissible only to the degree to which the reality of life confirms it. In looking at social reality we realize that, although all men are by their very being productive creatures,

> It is superfluous to add that men are not free to choose their *productive forces* -- which are the basis of all their history -- for every productive force is an acquired force, the product of former activity. The productive forces are therefore the result of practical human energy; but this energy is itself conditioned by the circumstances in which men find themselves, by the productive forces already acquired, by the social form which exists before they do, which they do not create, which is the product of the preceding generation.[103]

Thus, although men create their own social selves in the process of productive labour, each man/woman does not create from nothing the very means of such production -- i.e., the instruments and relations of production. These are 'inherited' by men at birth, and the means of production is itself a 'product' which each generation finds before it.

It is this which makes man an inherently historical entity. Man is more than 'transtemporal' and 'transgenerational.' Because his very species being demands that his very conscious existence assume different forms -- correspondent to the specific mode of production -- he is a historical being. Man is a being who takes part in the creation of his/her existential self (i.e., engages in productive labour); a being who inherits the form of his particular historical consciousness (the particular mode of production); and a being who contributes to the transcending of his particular historical consciousness (through the continual heightening of the contradictions of the given mode of production).

Of course there is nothing "mysterious," to use Marx's term, in such a state of affairs. Because all the elements and relations of the mode of production are wholly material and wholly dialectical, we can comprehend the development of the course of history. The dissolution of modes of production and the formation of new modes are wholly material fluxes.

Because the mode of 'production' is a mode of 'labour,' and because labour cannot only be 'labour in the abstract' (it must also be labour in a particular form), and because the 'means of production' consist of specific instruments of production and specific relations of production which change over time (because the dialectical -- ultimately antagonistic -- tensions therein eventually result in qualitative changes in the means of production): (a) The ontological reality of man is that mankind does more than merely live across generations -- man is a conscious creature whose specific expression of his being (productive labour) is 'time bound' by the particular state of the specific means of production and social relations he is born into. (b) In that man is conscious of his/her being and in that man is aware that the very conditions which determine the expression of his/her productive capacities are temporal-specific, yet are a legacy of a previous generation, men simultaneously perpetuate their historical mode of production while contributing to its dialectical dissolution into a new mode.

It is in the above sense that men are simultaneously 'free' and 'determined.' They are determined in that they are born into an "epoch"; into a specific mode of production which acts as an all-pervasive 'gestalt' through which they both perceive reality and act out their existential being. They are free in that the mode of production is not a 'linear' structuring of consciousness; it is replete with all manner of what we have called compatible and antagonistic relations in all spheres of life which offer individual men the opportunity to set their sails to seemingly countless winds.

> Men make their own history, but they do not make it just as they please; they do not make it under circumstances chosen by themselves, but under

> circumstances directly encountered, given and transmitted from the past.[104]

More importantly, the mode of production men are born into is not a fully independent 'determining circumstance' to which they react and within which they act. The mode of production cannot be independent of men because it is the activity of men. Moreover, it is fully material and as such fully comprehensible to human consciousness -- as Marx himself typifies. But it cannot be comprehensible as a mere 'idea'; because it is material and the product and process of human activity, it must be grasped as both idea and practice. There is no human existence without human formation and perpetuation of the historical process because men are necessarily conscious and necessarily productive. There is no 'neutral corner' from which men can 'observe' history and not be an active, causal, part of history. This is the negation of the very concept of man. Thus the realization that men make history resolves itself into a tautology: to be human is to be conscious and to labour; labour takes place within a mode of production; a mode of production is merely the organic (not aggregate) sum of human activity; thus each man/woman is a constituent, and causal, component of the historical process. However, this is a material tautology and as such demonstrates its proof not in logical categories but in material categories. The ontological and epistemological level of human existence is the level of historical materialism, finding expression in a mode of production. All components and relations of this level of existence are social, and inseparable from human activity. In consequence, only activity itself -- conscious, productive, labouring activity -- constitutes both the conscious proof and existential reality of man as a necessarily active and therefore necessarily historical being. As Marx summarizes: Second Thesis on Feuerbach:

> The question whether objective truth can be attributed to human thinking is not a question of theory but is a practical question. Man must prove the truth, i.e. the reality and power, the this-worldliness of his thinking in practice. The dispute over the reality or non-reality of thinking which isolates itself from practice is a purely scholastic question.[105]

Third Thesis on Feuerbach:

> The [non-Marxist] materialist doctrine that men are products of circumstances and upbringing, and that, therefore, changed men are products of other circumstances and changed upbringing, forgets that it is men who change circumstances and that the educator must himself be educated. Hence, this doctrine is bound to divide society into two parts, one of which is superior to society (in Robert Owen, for example).
>
> The coincidence of the changing of circumstances and of human activity can be conceived and rationally understood only as revolutionising practice.[106]

Eighth Thesis on Feuerbach:

> Social life is essentially practical. All mysteries which mislead theory into mysticism find their rational solution in human practice and in the comprehension of this practice.[107]

SUMMARY AND IMPLICATIONS [GENERAL AND HISTORIOGRAPHIC] OF MARX'S SYNTHESIS

The scope and complexity of the task Marx undertook resulted in a synthesis which warrants our recognition that his work constitutes a qualitatively new mode of inquiry -- mode III. It is hoped that the preceding exposition of mode III has outlined the basis of that synthesis; but it is not for one moment claimed that the entire breadth of that synthesis has been explored. It is the structure and the method of that synthesis which has occupied our attention; the final proof of that synthesis is a monumental task -- as the sheer volume of Marx's own works testifies. Furthermore, that mode III is in any way the 'final,' so to speak, mode of inquiry is not being claimed either. Indeed, it is the precise objective of our next chapter to -- hopefully -- not only improve upon mode III but to sketch the barest outlines of what may evolve into 'mode IV.'

However, it is arguable that mode III is a 'success' in that it achieved the fundamental objectives outlined for it at the beginning of our chapter: incorporating the strengths, overcoming the weaknesses, and expanding the combined scopes of modes I and II. [The question of whether our articulation of mode III is the only possible -- or at least the only successful -- such synthesis arises. We argue that it is the only successful synthesis, and any challenge to this assertion puts the onus upon the competing claim.] If mode III has achieved its aims, it follows that any historiography which does not take full cognizance of that mode is operating within a restricted and philosophically, methodologically and heuristically outdated frame of reference.

In these, our concluding comments, we: (a) Strive to make concrete the specific manner in which mode III incorporates the strengths, overcomes the weaknesses, and expands the combined scope of modes I and II. (b) Outline some basic historiographic consequences of mode III. (c) Provide a partial and final summary of mode III. To achieve these objectives, we fall back upon our listings of the strengths and weaknesses of modes I and II at the beginning of this chapter to provide a frame of reference. We begin with the strengths of mode I.

(i) Strengths of Mode I Incorporated and Extended in Mode III

(1) We recall that mode I sought to replace unverifiable propositions with verifiable ones, and was willing to abandon established propositions when these were challenged by better verified ones. Certainly we have seen that Marx always placed all priority upon things as they 'really are,' and his entire works show a progression of his grappling with -- sometimes refining and sometimes abandoning, -- concepts. The criterion for the validity of a concept is its 'proof' in material reality.

Yet, this must not be interpreted in a narrow, physicalist, sense: first, there need be no absolute rejection of abstract concepts -- only the demand that they correspond to material reality. Thus 'production in general' is an admissible abstraction because it states what is common to all modes of production, yet finds realization only in specific, unique, modes of production.

Second, the concept of 'material' verifiability greatly expands the scope of verifiability to include not only reference to merely 'physical' entities, but to at least three ontological levels and the relations of interacting entities. As we have shown, the 'material' universe is not the 'atomic' universe of mode I.

The consequences of this for historiography are enormous: first, it is clear that the criterion of verification in material reality must apply to history. Thus the 'truth' of history -- of the assertions historians make -- is to be evaluated according to the same criteria as the 'truth' of any other discipline. Second, this does not limit history to mere content-specific description -- as was the case in mode I. Just as 'labour in general' is not an idealistic figment of the imagination because it is fully correspondent to 'labour in the specific' (material) context, so too 'history in general' is admissible to the degree that specific, material, historical circumstances verify the general abstractions.

Obviously, the scope of historiography is here greatly expanded. In particular: although men 'make history' only within the specific context of their mode of production, they can recognize the general or 'common' elements in the process of making history. Thus, although historical consciousness is structured by our mode of production -- and we have a different consciousness, literally a different context of species-being, from those who have lived within the bounds of another mode of production -- we can rely upon the abstraction (but material abstraction) of history 'in general' to allow us to commune with the humanity we have in common with men and women of other economic epochs. Thus, although history must always be material and context-specific, it can also simultaneously be a bridge between material and context-specific modes of production. The full demonstration of this would follow the same logic as the proof that labour in general is an abstraction fully compatible with the material reality of any labour in the specific. The consequence is that the scope of what constitutes a verifiable historical proposition has been greatly expanded -- commensurate with the expanded scope of 'materialism' as compared to 'empiricism.' This leads us to our second listed 'strength' of mode I.

(2) Mode I boasted a comprehensive epistemological theory based on the verifiable propositions of empiricism, resulting in an unambiguous conception of 'knowledge.' Mode III boasts an even more comprehensive epistemological theory, and an equally unambiguous conception of 'knowledge.' The difference is again a qualitative one, resulting in a great expansion of scope.

As we have seen, mode III went far beyond the ontological basis of mode I -- which falls fully within our category of 'mode of reaction.' Yet even the mode of reaction is a more sophisticated and expansive epistemological model as it recognizes a more complex ontology -- even at the level of inorganic matter -- than the atomic entities of mode I. Not only entities but also the inter and intra-relations of entities are integral epistemological components of mode III, and therefore both 'being' and 'change' fall within the realm of comprehension. Combined with a recognition of the universe as comprised of many, inter-related, levels of ontological transformation and epistemological significance, the above results in mode III's unambiguous, materially based, epistemology which defines 'knowledge' not in any monolithic sense, but recognizes that different aspects of reality are qualitatively different and correspondingly yield different forms of knowledge. In consequence, 'historical' knowledge becomes one specific form of knowledge -- knowledge at the ontological and epistemological level of historical materialism.

(3) Mode I gives clear-cut internal criteria of logic, validity, objectivity and 'truth.' Mode III also offers such criteria, but they are not 'internal' criteria. In mode III we find none of the fascination for rigorous linguistic analysis and strict application of the rules of formal logic mode I evidences.

To begin, the logic of mode III is dialectical logic -- not formal logic. Thus the establishment of rigid rules of logic violates the basis of dialectical, material, reality. Instead, mode III is more concerned with the principles (not 'rules') of logic, as the principles of dialectics elude rigid formalizations. This does not in any way represent any form of reversion to mystification. Quite the opposite, as the only criterion of validity is correspondence with the actual, existent, dialectical fluxes of material reality. Therefore logic does not require 'internal' checks, because the only admissible 'check' is reality itself. This safeguard keeps mode III from slipping into idealism -- which, for example, mode I's notion of logic as a system of connections of "meanings" would be regarded to be. By keeping logic 'open' in the sense of throwing the onus of proof only upon correspondence with material reality -- not fulfillment of logical conditions of adequacy -- mode III ensures that the 'prejudicial' -- i.e., viewing through an idealistic framework -- apperception of reality will be minimized.

This, of course, changes the notion of 'objectivity' as well. Objectivity in terms of 'passively' grasping reality is a great simplification. Not only are there 'levels' of 'reality,' the highest level -- historical materialism -- clearly recognizes that the perceiving actor absolutely cannot be passively privy to any 'truth.' The mode of production is characterized by the active participation of man as its very foundation, and it is furthermore 'historical.' As consciousness itself changes, and the ontological and epistemological level of man is bounded within a mode of production, there is a necessarily phenomenological dimension to observation. 'Truth' is furthermore more properly a number of -- grantedly inter-connected -- 'truths.' Each ontological and epistemological level has its own corresponding 'truths' -- in terms of 'true statements' which can be made. Each successive mode of production changes both the consciousness of man and his/her 'gestalt.' 'Truth' therefore becomes relative to a degree, but not 'absolutely' relative. The discoveries of production in general, labour in the abstract, consciousness in general, etc. are 'truths,' but they are so only in that they have specific manifestations. Thus to see the 'absolutely' 'objective' reality or the 'truth' of human existence is a myth because human reality exists in only context-specific forms. Thus truth must be recognized as necessarily being grounded in specific situations. Abstractions can be made, and 'true' abstractions; but any attempt to dwell purely on such abstractions as 'production in general' is done at the risk of lapsing into idealism.

The correspondent implications for history have already been noted in the discussion under our first point above. Historians record the past within the framework of 'production in general,' the 'appropriation of labour in general,' etc., but these are only the, so to speak, 'general gestalts' within which the 'specific gestalt' -- i.e., the particular mode of production -- is graspable. As such, the framework of general categories is merely the epistemological and heuristic tool within which the specific picture must assume dominance. These general concepts have no 'sanctity' and no 'validity' beyond that afforded them by the material reality. They are always subject to verification and consequently to rejection. But they do provide a framework of 'meaning' in that specific epochs become comprehensible to other epochs, thus 'historical truths' -- while always specific to a mode of production -- allow historical comparison and inter-mode of production comprehension. Of course, mode I would not allow this as there the particular must stand solely on its own, to say nothing of mode I's anathema to any inclusion of the human actor as a component of truth or objectivity.

(4) Thus both mode I and mode III possess a highly refined, concrete, methodological program for all inquiry. The qualitative differences within their respective programs are, however, profound.

(5) On the question of 'explanation,' we have noted that mode I has a clearly defined concept. In that mode I's concept is wholly 'linear' -- in relying upon the establishment of even more detailed 'antecedent conditions' and casting this sequence of events within a deductive formal schema -- opposes mode I to mode III. Not only is the notion of linear causality non-dialectical, but it restricts explanation to 'description.' Because there is no general framework within which to cast specific events ('general laws' are merely mathematic summations correlating a specific phenomenon with antecedent conditions), explanation is limited to a summation of specific occurrences. Furthermore, a one-dimensional perception of reality -- reality as one ontological and epistemological level -- imposes a homogenous form on any grasping of reality.

Mode III overcomes these limitations by recognizing levels of reality, and also by recognizing the dialectical aspects of reality. Thus 'explanation' becomes both the simultaneous grasp of relational factors and, in the case of explanation of human events, the grasping of specific events within the frameworks of specific modes of production and general conditions of production. The historiographic consequences have been covered in the above points.

(6) Mode I, within its own delineated bounds, defends the claim that it is the single method for all 'rational inquiry.' We have seen how mode III has greatly expanded the parameters of mode I's 'delineated bounds,' and recognizes that different levels of ontological transformation and epistemological significance demand corresponding methods of inquiry.

(7) The above puts into perspective the virtues of mode I in recognizing and acknowledging its own limitations -- understood as the limits of its epistemological, methodological and explanatory scope. Within the limitations mode I imposes upon itself, it does a satisfactory job. Those limitations, however, are directly the result of an extremely simplified and one-dimensional ontological and epistemological perspective. In contrast mode III, by recognizing various levels of ontological transformation and epistemological significance, is able to greatly expand the scope of its field of inquiry and offer corresponding avenues of analysis and comprehension. Thus mode III not only possesses all the strengths of mode I, it greatly surpasses mode I's virtues. This becomes even more evident when we turn to briefly outlining how mode III transcends mode I's weaknesses.

(ii) Weaknesses of mode I Transcended by Mode III

(1) We saw that mode I is flawed by a very elusive concept of causality which is always conditional upon an endless and ever more elaborate statement of 'antecedent conditions.' Inherent in such a linear notion of causality is the lack of a 'context' within which events are 'interpreted' and 'understood.' That such a concept of causality cannot ever reconcile itself with the reality of qualitative change is readily apparent, but the comprehension of events at even one ontological and epistemological level is also hindered. By ignoring the dialectical relations between and within entities, the condition for understanding events is always sought

'outside' the events themselves. As long as such events are perceived as ultimately autonomous in the sense that discreet, independent, entities are involved in what is essentially a relation based upon a Newtonian model, the 'patterns' of interaction we perceive -- i.e., 'general laws' -- have an inherent element of 'accident,' so to speak, about them. That is, the correlations general laws identify are tentative in that they show a connection between phenomenal events but we cannot infer that the connection is a necessary one. This is the classic Humean statement on causality, and we have noted how belaboured Popper's and Hempel's attempts to bring in the idea of some sort of necessary connection were. Mode I never does succeed in the establishment of necessary connections because it is based upon an 'atomic' view of reality.

Mode III escapes this dilemma by recognizing that relations are themselves a material dimension, and the context of circumstances that comprise any reality provide both the precise causal connections of events as well as the framework for comprehending any one event vis-à-vis other events. Of course at successive levels of ontological transformations the epistemological significance of events changes, but at all times events find their 'explanation' in their own material context.

(2) This allows mode III to overcome mode I's limited predictive/retrodictive capability. Because all relations are material, all can be grasped. The 'complexity' of any situation -- remembering that there are dialectical relations within entities, as well as between entities, as well as with the organic whole --

must not obscure the real, tangible, ascertainable, material basis of the situation.

By recognizing reality to be more like an organic gestalt than a scattering of independent, atomic, entities within a void, the inter-relationships between and within entities begin to yield necessary and sufficient conditions for change. Such 'change' does not preclude qualitative changes. Because entities carry within themselves the conditions of their existence, the dialectical study of change reveals a material course of change. Recognition that the conditions of change are materially inherent in material circumstances themselves means that the paranoia of some 'theoretical' 'outside' influence is shed. Thus an internal 'course' of events replaces the notion of an externally caused 'sequence' of events.

Of course the material context changes with every level of ontological transformation, but the epistemological significance of each level is comprehensible. Once the ontological context has been identified, it can and will yield the material basis of its existence -- as evidenced both in its stability and in flux. Because mode III identifies the ontological and epistemological context of man -- i.e., the mode of production -- all the necessary conditions for predicting/retrodicting change are established. The sufficient conditions may never take the form of ad hoc hypotheses, and must squarely be rooted in the necessary material conditions. The test of the degree to which the outlined necessary conditions are truly such is reality itself.

Thus the 'explanatory breadth' of mode III is such that material circumstances provide both the criteria and the validation of prediction/retrodiction. Indeed, 'change' cannot be avoided even at the theoretical level because it is an inherent part of reality and therefore necessitates its own explanation.

For historiography, the consequences are profound. It is only in history that we have the possibility of testing the validity of the mode of production as an expression of the necessary conditions of human existence. Thus, far from refusing to draw any 'lessons' from history -- as is the case with mode I -- mode III consciously turns to material history to test the material basis of the conception of history as a succession of modes of production.

At the level of human existence: if change is part of material reality, and if the basic conditions of human reality are encompassed within a mode of production, then prediction (or retrodiction) of changes within modes of production is the fundamental test of whether our concepts truly correspond with material reality, or whether they are tinged with idealism. Even more profound in its ramifications is the final limitation of mode I which is transcended by mode II.

(3) We have previously outlined the necessity for mode I's lack of sociological and ethical criteria: what may be called criteria of 'meaning.' This is simply because in mode I 'events' (including the phenomenal dimensions of human actions) cannot be placed within any necessary context. At most, we can discover a handful of attendant (i.e. 'antecedent') conditions. Mode III, on

the other hand, has an encompassing context -- a 'field of reference' -- within which the specific action of a human actor -- indeed, entire societies -- can be placed.

In mode III, the mode of production provides a context for human actions. The necessary condition of a mode of production is a labouring creature -- i.e. man. The basis of labour we have seen to be the production of value. As the source of labour, and therefore the source of the values labour produces, man 'owns' his own labour and the values produced by his labouring. Yet, labour can take place only within a social context -- it is a necessarily social activity, as is man necessarily a social animal. Therefore there is a sort of dual claim upon the fruits of man's labour. On the one hand, individual men as the producers of their own labour have a claim upon the values so produced. Thus men have a right to directly appropriate their own labour. Alternately, because labour can only take place within a social dimension, it is apparent that the claim of the individual upon the products of his labour is tempered by an equally valid (because it is an equally necessary condition of labour itself) social claim upon labour. Correspondingly, the degree of 'compatibility,' the degree to which antagonisms between the individual and society for the appropriation of labour are eradicated, is the normative measure of the 'justice,' 'fairness,' 'humanness' -- or whatever one may wish to call it -- of any mode of production. A mode of production is also a mode of appropriation of labour, and it provides the context -- on the above basis -- for normative evaluations. We emphasize, however, that this is a fully material normative criteria. It does not spring from any abstract notions of 'good' etc., but from the material nature of man and society themselves.

The obvious implications for historiography are staggering. Far from the purportedly 'value free' attempts at 'description' the mode I historian undertakes, the mode III historian has at his disposal material criteria for the judgment of not only men but also civilizations. Value judgments on modes of production are precise -- calculable from the degree of antagonism between social and individual appropriation -- and we can even use this as a measure to compare modes of production. In terms of individual men, their ethics are judged in the role they play within the mode of production they inherit. If they are contributors to the exploitative appropriation of labour, they deserve harsh historical judgment; if they are part of a movement for the greater social and individual appropriation of labour, they deserve historians' praises. Thus we have in every age 'progressive' and 'reactionary' elements; thus we have a literal 'hierarchy of consciousness' within which some men and some societies are more 'human' and more 'just' and more 'enlightened' etc. than others. Thus we have material criteria upon which to identify these 'progressive' and 'reactionary' elements. Thus we also have the material, indisputable, proof in social reality that the communist mode of production -- to the degree that it reconciles individual and social appropriation of value -- is ethically superior to other modes of production.

Of course the above also ties in to our previous discussion on prediction and retrodiction. But one outstanding achievement of mode III is that, by going beyond the simplistic notions of 'physicalism,' of 'atomism' to the more sophisticated and encompassing ontology and epistemology of 'materialism,' social science -- history included -- is provided with ethical criteria without the necessity of recourse to idealism or to mere belief or blind trust. We now turn to the strengths of mode II and discuss mode III from that perspective. [As we have previously noted, the strengths of mode II are antitheses of mode I's weaknesses, and vice versa. Correspondingly, our discussion will rely upon our above comments.]

(iii) Strengths of mode II Incorporated and Extended in Mode III

(1) We have noted that mode II has a clear concept of causality. That clarity was bought, however, at the price of positing an ahistorical, immanent, unfolding of reality. There is only one 'context' in mode II; that is the context provided by some 'inner force' which is in the final analysis independent of its material manifestations. Thus mode II rejects the validity of the very substance of existence -- material reality -- as a 'secondary' manifestation of 'true reality.' That this 'inner,' 'true' reality is wholly immaterial we have already noted. That this inner reality works on a model of causality as linear as mode I's is evidenced from the rigid 'progression' of the pre-ordained

'development' of this 'inner force.'

Such a model of causality is tautological because it can offer no proof of itself. All aspects of material existence are but 'moments' which must be 'explained' through abstraction into corresponding antithetical 'ideas.' There are no criteria of verification because only the 'translation' of physical 'moments' into abstract 'categories' which are then correlated with their 'antithetical categories' offers any hint of the nature and existence of an inner, causal, force propelling virtually all of reality. Thus the 'proof' of both the existence and direction of the 'unfolding' of some immanent force -- 'dragging,' as we have noted, phenomenal reality and man with it -- becomes a linguistic and rationalistic matter -- a task for logic. In this way mode II -- although it uses dialectical rather than Aristotelian logic -- is just as 'formal' as mode I. In a word, material reality and the course of material events must seek conformity with the explanatory model mode II uses, rather than the model being dependent upon the actual, material, course of events.

Mode III [as we have seen] replaced this unprovable basis for a theory of causality by identifying the material forces -- entities and relations -- at the root of all change. Thus material process became integral with material existence, and the attendant gap which is the necessary result of all ontological dualism was closed. Also, in providing material criteria for analyses of material situations, the teleological element in mode II was eliminated as now situations could be explained within their own immediate context as well as within a broader (historical) context.

The most obvious historiographic advantage is that the material and the subject of history become united. The activities of men become 'justifiable' as interesting in their own right because human activity is no longer a mere manifestation -- an 'epiphenomenon' to use a previous phrase. In so uniting the subject of history -- the affairs of men -- with the method of history -- the investigation of the concrete practices of men -- history is no longer 'alienated' from itself. 'Historical causality' is to be found and understood within the immediate historical subject, and the verification of 'ideas' of historical causality is to be found in the material processes of history itself.

(2) Precisely the same limitations are inherent in mode II's admittedly courageous attempts to incorporate prediction and retrodiction. Because the basis of history is independent of the material of history (men and societies), all history involves a mere 'interpretation' of events to 'explain' them in terms of wholly abstract categories which are pre-ordained. Thus there is no prediction or retrodiction in the true sense of the words -- i.e. the specification of events in their uniqueness -- there is only the establishment of _a priori_ categories with which any event we may uncover or predict/retrodict must 'fit.'

That this is a purely "sophistic" approach (as Marx is fond of accusing Hegel) is evident, and it is purely a linguistic solution to a real question -- i.e. the prediction/retrodiction of events in the specific. It is precisely against the idealism of the Hegelian abstract categories that Marx rebelled, as these categories are so all-inclusive as to be meaningless. And that these categories are treated 'dialectically' is again irrelevant because the categories are so broad that any specific content can be made to 'fit.' In this sense, mode I's criticism of dialectic through the writings of Karl Popper is correct when he concludes:

> Any development whatsoever will fit the dialectic scheme; the dialectician need never be afraid of any refutation by forthcoming experiences.[108]

Popper is correct in his criticism of mode II -- i.e. dialectical idealism -- but in the above citation he is also including Marx's dialectics -- dialectical materialism. In such an expansion of his criticism Popper is in error. For prediction/retrodiction in mode III is based -- like everything else -- upon material verification of such projections. Because, as we have seen, the entities and relations Marx recognizes are, in his own word, "empirical," mode III demands that only specific, contextual, material predictions and retrodictions constitute acceptable tests of historical materialism. Thus the historian may never work in the clouds, so to speak, and clear and specific outlining of fully material circumstances constitutes one task of history -- although, as we have noted, this does not preclude the formulation of correspondent, materially based, theory. Indeed, whether one reads Marx's anthropological works, his stunningly insightful and numerous works on contemporary (in his lifetime) historical events, or even his projections on the economic structure of communist society, one is immediately struck by the painstaking exposition of the precise structures and relations of the particular situation. Marx always emphasized the "scientific" nature of his contemporary, retrodictive and projective analyses, and never sought any authority, or any form of 'proof,' other than material reality. Such imperatives are also integral historiographic criteria. The exemplars or 'models' for mode III histories already exist in Marx's own works; models wherein specificity of material events and relations is outlined in full correspondence with compatible theory. (Our personal favorite such exposition is the short, detailed, insightful, The Class Struggles in France: 1848 to 1850.)

(3) Similarily, mode III goes beyond the stringency of mode II's valuational, sociological and ethical criteria of 'meaning.' That meaning is extrinsic to the very existential, value creating and normative subject (man) in mode II is readily apparent. How mode III has rooted ethical and normative criteria squarely in material, human, circumstances we have already discussed.

(4) Mode II, we recognized, succeeded in relationally integrating all levels of reality -- including levels far outside the scope of mode I -- within a comprehensive cosmology. Yet, again, such integration is ultimately "sophistic." By merely reducing all aspects of reality into idealistic categories, mode II imposed an artificial, essentially linguistic, solution. In the end, the reality of mode II is as one-dimensional as that of mode I: only 'ideas' have replaced 'phenomena' as the ultimately sole necessary constituents of the universe.

How mode III overcame this simplification by recognizing levels of ontological transformation and epistemological significance we have attempted to outline. The historiographic consequence is a more clearly demarcated place for the discipline of history in human activity. The grandiose claims of history (as a discipline) in mode II were based on the assertion that in history we find 'clues' to the unfolding of all of the cosmos. Thus the study of history was the study of literally the 'plan' upon which our past, present, and destiny are blueprinted. In mode III the subject of history becomes man in society, and recognizing levels of ontological transformation and epistemological significance prevents the historian from anthropomorphizing non-human dimensions of existence. In the above manner, mode III effects a more comprehensive cosmology because the ontological foundations of reality are seen in their subtle hues, and epistemological criteria vary accordingly. There is no attempt to 'reduce' the complexity of reality into neat cognitive packages, appealing in their simplicity and seemingly comprehensive.

(5) In like manner, we recognize mode II's success in using dialectical logic to explain change and process, yet the limitations of that explanation must also be recognized. These have been discussed in the preceding points at sufficient length. We now turn to the weakness of mode II outlined at the beginning of our chapter.

(iv) Weaknesses of Mode II Transcended by Mode III

(1) It is recognized how mode II required an ontological 'leap of faith' in which sensory data assumed minor significance. Such a leap of faith is, ultimately, the central problem behind all dualistic conceptions of the universe. By clearly outlining how relations and entities are inherent in dialectical, material, reality, mode III eliminates the need for such ontological schizophrenia. Again, this does not preclude the recognition of ontolpgical levels of reality, but these levels are unified within a material organic totality.

(2) That mode II is not nearly as unified a 'movement' or 'school' as mode I (because of a lack of clear criteria and methods) is a consequence of the necessary vagueness of mode II's abstract categories. Yet conformity is not necessarily a virtue, and mode III actually sets up the basis for its own refutation.

The 'validity' of mode III, as we have stressed, is a purely material question. Because it rests upon the precise nature of material reality, there can be no sacred 'dogmas' which over-ride the material ontological and epistemological imperatives. The investigation of material reality provides the only acid test of 'truth,' and Marx's own struggles with contemporaries was always centered around debates on the material proofs for their differing viewpoints. History is one arena within which the fight is fought and material verifications are sought. Again, it is only in the degree to which historians succeed in uncovering specific, material, historical relations that general notions such as 'production in general,' etc. assume any methodological or heuristic import whatsoever.

(3) And we have noted how mode II's access to underlying reality was problematic in consequence of its lack of clear criteria and methods, and in its demanding an ontological 'leap of faith.' There were no clear epistemological rules and consequently no clear methodology for the conduct of inquiry. This is of course a consequence of the vagueness of mode II's idealistic categories. Mode III, in recognizing purely material ontological bases, readily yields corresponding epistemologies. Because reality is a material organic totality, the problem of how to achieve an epistemology which can overcome the schism created by ontological dualism is overcome.

(4) Similarily, because mode III avoids mode II's dualism of 'phenomenal' and 'metaphysical' reality, the corresponding basis for a rigidly hierarchical ontological, epistemological and ultimately sociological structuring of reality is undermined.

As we have seen, the 'priority' of the metaphysical basis of reality reduced all of material reality -- including human reality -- to essentially the role of a dependent variable. Mode III instead recognizes reality to be comprised of levels of ontological transformation and epistemological significance within an organic totality. The differences therein are real, material, differences, but their dynamic is a function of their own existence -- they are not 'epiphenomena' of some 'deeper reality.' Thus the question of 'superiority' or 'inferiority' is a question 'internal' to each ontological and epistemological level. It is not a question which can be asked of reality as a 'whole' because there is no reference point 'outside' specific material reality which can serve as a standard. Thus although mankind, operating within a mode of production, has ethical criteria (as we have seen), the application of such standards to the mode of integration is idealistic because it is anthropomorphic. The great strength of mode III's materialism is that reality always provides its own existential basis. Thus the question of the 'superiority' of a mode of production over a mode of integration or a mode of reaction is not a normative question but a material question. And material questions can only be answered within material circumstances. Thus the question becomes meaningless because each material level of ontological transformation and epistemological significance is based wholly upon its own self, therefore applying criteria inherent in one level to another level is wholly invalid.

Mode II, of course, was able to measure all of reality against the standard of the 'will,' the 'purpose,' etc. of some autonomous immanent, immaterial, 'reality,' therefore the relative 'superiority' of different aspects of reality was judged in terms of conformity to the postulated 'essence' of such a metaphysical entity or force. Thus if 'true' (metaphysical) reality is Hegel's 'idea,' then consciousness and thought become the ultimate forms of existence and thus man is 'superior' to animals, etc. Or, if 'God' is the immanent basis of all reality, then possession of a 'spiritual nature' is the sign of the superiority of man over the rest of nature. (Of course, the degree to which man is not 'pure' consciousness or 'pure' spirit is the measure of the degree of his/her 'inferiority' to the 'idea,' to 'God,' etc. and designates mankind's corresponding 'place' on the cosmic hierarchy.)

Mode III will not recognize such standards because all standards are internal in material reality itself. Thus to 'compare,' say, rocks and dolphins is to look at reality ethnocentrically -- i.e. from the perspective of human standards. However, we are not here arguing for complete relativism. Specifically, entities existing within the same ontological and epistemological mode can be 'compared' so to speak -- but only with each other. Thus if one ontological characteristic of the mode of integration is that entities are transgenerational, then one measure of the 'superiority' of sharks over dinosaurs is that the former are still fulfilling their ontological imperative. But again this is a purely material question which can only be examined within the material ontological parameters of a specific ontological and epistemological level. We cannot use 'human' standards -- i.e. the standards of a mode of production -- to ask whether sharks are more 'desirable' than dinosaurs because the notion of 'desirable' presupposes consciousness in a human form, and this sharks and dinosaurs do not possess. From the perspective of a rock this is also without 'sense' as the only existential dimension of the mode of reaction is transtemporal existence -- so the notion of perpetuation of life is an imposition from another ontological and epistemological level.

THE STUDY OF REALITY AS THE STUDY OF MAN

We appreciate that the above comments are lapsing into silliness, but they do lead to a considerably more profound conclusion. The business of man -- as existing at the level of a mode of production -- is not to busy himself in the idle pursuit of such ultimately metaphysically based questions as "What is the hierarchical order of the universe?" As we have noted earlier, Marx quickly turned from more broad 'cosmological' studies to the study of the human condition. He did so because man is both the 'inhabitor' and 'creator' (i.e. he is a necessary condition) of the mode of production. The mode of production is the bounds of his material reality, and it is the uncovering of that reality that ultimately provides all significant knowledge. Here the ancient Greek dictum "know thyself" assumes a new context, but there is a parallel lesson: only by discovering the material realities of his own consciousness can men even recognize the 'gestalt' through which they view all of reality. (Thus even supposedly 'objective,' 'scientific' questions about the inorganic universe are, as we have seen, 'structured' by our general consciousness of 'the world' provided by our specific mode of production.)

Thus everything is ultimately and necessarily connected with the study of man because we are men and grasp reality only as men. And, as we have seen, because the mode of production is fully material we are able to make fully verifiable discoveries about ourselves. Thus there is a basis for a hierarchy in the affairs of men but, again, only on criteria endemic to the mode of production. As the above discussion on labour as an ethical criteria indicated, there is a basis upon which we can judge men. As the attendant comments on the mode of production as a materially verifiable concept illustrated, we can judge the relative 'truth' of our views. And as the discussion on the equitable appropriation of labour as the normative criteria for judging a society revealed, we can even judge social systems and nations. This list could easily be expanded, but the simple point is that because human existence has a material base, and because that base serves to verify the 'truth' of views on 'the human condition,' then we have a basis upon which to rank -- ethically, politically, intellectually, etc. -- men. [Again, this is not any form of dogmatic ranking or ranking according to abstract principles of 'justice,' 'desirability,' etc., as material reality in the form of the mode of production provides the test of any assertion. Again, the question of any sort of defensible hierarchical view of the 'entire cosmos' is metaphysical nonsense because we perceive that very cosmos through a purely 'human gestalt' -- i.e. the mode of production.]

All this simply reinforces the disciplinary imperatives of the historian. The subject, the scope, the objectives and the methodological criteria of history are clear. The degree to which -- understood within the above contexts -- the historian helps man to 'know himself' is the degree to which history deserves our attention and is the degree to which historians are able to be 'progressive' individuals within the historical processes they themselves are helping document. The fantastic implications of this alone, the possibility that the poet's dream that men can become the 'captains of their ships, the masters of their souls,' is enough to warrant the close attention of historians to the historiographic imperatives of mode III. Certainly, and sadly, neither mode I nor mode II offered any such promise: in the former history was but one more descriptive discipline offering more and more 'facts' out of which 'meaning' could never be extracted; in the latter history documented the servitude of man to a relentlessly unfolding 'plan' which he could neither escape nor significantly influence. The mode III historian finds in 'demystified' form man's meaning rooted firmly in the material conditions of his own existence; simultaneously he/she uncovers the avenue towards man's achievement of his/her human potential -- without need for 'faith,' with the conscious grasping and directing of the material, social, existential, basis of man's own humanity. Historians too have only interpreted the world in various ways; the point, however, is to change it.

THE DEVELOPMENT AND COHERENCE OF MARX'S WORKS

By way of conclusion, in an attempt to be more fully dialectical in our exposition of mode III, we briefly supplement our theoretical account of Marx's ideas by noting the actual development of his works. This is necessary as a properly dialectical account of method must not only include the method presented in its final, abstract, categorical and procedural form; it must also include the real, material, path the advocate of such a method took in arriving at his position -- which now exists in the form of a theoretical formulation. We therefore outline what we see as both the logical progression and organic totality of the corpus of Marx's own works before returning to our continued articulation of Marx's weltanschauung in its finished, abstract, form.

It is notable that our above citations of Marx are taken from works falling within Marx's so-called 'transition period' from so-called neo-idealistic 'philosophical' to fully 'material' [i.e. 'economic'] interests. We do recognize a transition, but nothing as severing of the organic unity of Marx's views as any sort of firm "epistemological break." Rather, we view Marx's works as the following progression.

In his early works, Marx is grappling with the development of a philosophic method. Marx's earliest (1841) work, his doctoral dissertation, was wholly within the tradition of 'natural philosophy' and framed the resolution of a fundamental problem [the aforementioned failure of Democritus and Epicurus to arrive at compatible conclusions from compatible premises] in wholly methodological terms. Similarly, although here we already clearly perceive a change in emphasis, his Contribution to the Critique of Hegel's Philosophy of Law (1843) is, literally, a line by line analysis of Hegel to show, quite simply, that Hegel had utilized a proper method but had reversed the true order of categories. The 'problem' with Hegel, in Marx's view, is that Hegel employed "sophism" (a term Marx specifically uses in several places) to avoid examination (at virtually every critical point in the dialectic) of any 'thing in itself.' Instead, Hegel treats entities in terms of universal categories. Everywhere, Marx tries to elucidate "characteristic example[s] of how Hegel half deliberately turns away from the intrinsic character of the thing he is dealing with, and imputes to that thing in its restricted form a significance the very reverse of this restrictedness."[109]

The end result is that Hegel mistook the 'rational,' 'articulated,' 'ideological' notion of the legal state as the basis for "civil society" [i.e. the material conditions and relations of people in daily life]. Of course, the state itself is a "precarious reality" because it is "dependent upon something else" in that it finds its "true being" in a more universal being,[110] and thus the process goes on. The methodological criticism Marx makes of Hegel can, however, be summarized in his following words:

> . . . Hegel only expounds a *state formalism*. The actual *material* principle is for him the *idea*, the abstract mental *form* of the state as a subject, the absolute idea which contains no passive, no *material* element. By contrast to the abstraction of this idea the characteristics of the actual, empirical state formalism appear as *content* and hence the *real* content appears as *formless, inorganic matter* (in this case the actual person, the actual society, etc.).[111]

This is 'idealism' because the relationship of 'concepts' and 'reality' is reversed. Essentially this is also the point of *On the Jewish Question* (1843).[112] Because religion and the state are equally 'idealistic' categories of dialectical analysis, both are inadequate for precisely the same methodological reasons.

We see, in this early period, Marx was concerned with grounding dialectics firmly in materialism. The result was that Marx refined to his satisfaction a philosophic method which he felt corresponded to the reality of the world. However, as he developed his method, he simultaneously recognized that it has real consequences in the concrete practice of society -- not merely in the formal method of philosophy (philosophy as a discipline).

This was obvious to Marx even in his dissertation. After all, the discrepancy in the social consciousness and practice of Democritus and Epicurus was to be found in the 'concrete' form of their 'theoretical' (methodological) differences. Marx therefore recognized the unity of theory and practice from the beginning. Correspondingly, his dissertation, On the Jewish Question, and Contribution to the Critique of Hegel's Philosophy of Law are -- in addition to being treatises on method -- thoroughly practical works in that they recognize and address social practice.

The instance of the latter work is particularly instructive here. In February, 1844, Marx published a subsequent "Introduction" to his Contribution to the Critique of Hegel's Philosophy of Law. There the focus of his writing shifts quite clearly from method to object -- he 'grounds' theory in the real condition of the German proletariat. Yet, simultaneously, he recognizes that theory is essential and therefore there is organic unity between social reality and philosophic method. ["The weapon of criticism cannot, of course, replace criticism by weapons, material force must be overthrown by material force; but theory also becomes a material force as soon as it has gripped the masses. Theory is capable of gripping the masses as soon as it demonstrates ad hominem, and it demonstrates ad hominem as soon as it becomes radical. To be radical is to grasp the root of the matter. But for man the root is man himself."[113] And, "Theory can be realized in a people only insofar as it is the realization of the needs of the people."[114]

The dialectical struggle between exposition of a philosophical method and articulation of the concrete social dimensions and consequences of that method are the concerns of Marx's so-called 'middle works.' It is precisely for this reason that we drew our above examples from those works. During 1844-6 Marx is seeking to 'ground' and articulate his dialectial materialism in fully material social categories. That is, the questions of method (dialectics) and premises (materialism) settled, he sought to clearly illustrate the social actuality and dynamics of dialectical materialism's premises and principles. [In so doing Marx recognized, of course, that a direct transference of method is not possible as the method must be modified to reflect the ontological reality of the social mode. In other words, as we have seen, the 'dialectical materialisms' of the mode of integration and mode of production are different from the relatively simple dialectical materialism characterizing and applicable to a mode of reaction. Nevertheless there is compatability at all levels, even though there may not be equivalency. This is because relations are still dialectical and material, as is existence.]

That is why the 'middle works' are so rich and illustrative in their attention to both exposition of method and demonstration of the new content of that method. The *Economic and Philosophic Manuscripts* of 1844, for example, use the context of political economy, yet the emphasis is upon "estrangement of labour" and "alienation of labour." These are precisely Hegelian categories, cast in a now wholly material form (as is the unfolding dialectic of the material contradictions in society). The methodological aspect of the *Manuscripts* is clearly illustrated by the detailed critical analysis of Hegelian philosophy contained in the third manuscript. Furthermore, it seems that the synthesis of method and content is logically and 'naturally' political economy. For, as Marx summarily asserts:

> Let us provisionally say just this much in advance: Hegel's standpoint is that of modern political economy. He grasps *labour* as the *essence* of man -- as man's essence which stands the *test*:[115]

This is precisely the strength -- although it becomes misdirected and develops into the idealistic articulation, i.e. the 'metaphysical' pole of the dialectic -- of Hegel's views. The strength is formidable for, as Marx immediately continues:

> . . . he sees only the positive, not the negative side of labour. Labour is *man's coming-to-be for himself* within *alienation*, or as *alienated* man. The only labour which Hegel knows and recognises is *abstractly mental* labour. Therefore, that which constitutes the *essence* of philosophy -- the *alienation of man who knows himself*, or *alienated* science *thinking itself* -- Hegel grasps as its essence; and in contradistinction to previous philosophy he is therefore able to combine its separate aspects, and to present his philosophy as *the* philosophy. What the other philosophers did -- that they grasped separate phases of nature and of

> human life as phases of self-consciousness, namely, of abstract self-consciousness -- is known to Hegel as the doings of philosophy. Hence his science is absolute.[116]

Thus 'political economy' becomes the initial specific context for the dialectical and material analysis of social reality -- an analysis which had been undertaken 'in general' [i.e. at the level of philosophic method] in the 'early works.' Furthermore, in his "Preface" to the Manuscripts Marx explicitly states that a detailed "criticism" of "speculation" must take place within the framework of criticism of specific, concrete, subjects -- capped off finally by a synthetic work showing all the inter-connections of method and subject. As Marx notes, in commenting on his Contribution to the Critique of Hegel's Philosophy of Law:

> While preparing it for publication, the intermingling of criticism directed only against speculation with criticism of the various subjects themselves proved utterly unsuitable, hampering the development of the argument and rendering comprehension difficult. Moreover, the wealth and diversity of the subjects to be treated could have been compressed into one work only in a purely aphoristic style; whilst an aphoristic presentation of this kind, for its part, would have given the impression of arbitrary systematism. I shall therefore publish the critique of law, ethics, politics, etc., in a series of distinct, independent pamphlets, and afterwards try in a special work to present them again as a connected whole showing the interrelationship of the separate parts, and lastly attempt a critique of the speculative elaboration of that material. For this reason it will be found that the interconnection between political economy and the state, law, ethics, civil life, etc., is touched upon in the present work only to the extent to which political economy itself expressly touches upon these subjects.[117]

The phrase "only to the extent to which political economy itself expressly touches upon these subjects" is indeed a curious turn of words for the man who would later see that political economy touches on everything in a dialectical relationship of a primary type. In retrospect Marx, in his "Preface" to his 1859 work *A Contribution to the Critique of Political Economy*, makes the following comments on his 1843-4 *Critique* of Hegel and the evolution of his interest in political economy:

> . . . A few brief remarks regarding the course of my study of political economy may, however, be appropriate here.
>
> Although I studied jurisprudence, I pursued it as a subject subordinated to philosophy and history. In the year 1842-43, as editor of the *Rheinische Zeitung*, I first found myself in the embarrassing position of having to discuss what is known as material interests. The deliberations of the Rhenish Landtag on forest thefts and the division of landed property; . . . [etc.] . . . and finally the debates on free trade and protective tariffs caused me in the first instance to turn my attention to economic questions. On the other hand, at that time when good intentions 'to push forward' often took the place of factual knowledge, an echo of French socialism and communism, slightly tinged by philosophy, was noticeable in the *Rheinische Zeitung*. I objected to this dilettantism, but at the same time frankly admitted . . . that my previous studies did not allow me to express any opinion on the content of the French theories. [Soon thereafter] . . . I eagerly grasped the opportunity to withdraw from the public stage to my study.
>
> The first work which I undertook to dispel the doubts assailing me was a critical re-examination of the Hegelian philosophy of law; . . . My inquiry led me to the conclusion that neither legal relations nor political forms could be comprehended whether by themselves or on the basis of a so-called general development of the human mind, but that on the contrary they originate in the material conditions of life, the totality of which Hegel, following the example of English and French thinkers of the eighteenth

> century, embraces within the term 'civil society'; that the anatomy of this civil society, however, has to be sought in political economy.[118]

It is for precisely this reason that Marx never did publish his "series of distinct, independent pamphlets" -- he soon realized that political economy was not but 'one' material social context for the material analysis of society; it was the key to the "anatomy of civil society." However, even though Marx made this transition quickly he did not make it instantaneously. The Holy Family (1844) is at base a methodological debate. The German Ideology (1845-6) is, in Marx's own words, an attempt by he and Engels "to set forth together our conception as opposed to the ideological one of German philosophy, in fact to settle accounts with our former philosophical conscience. The intention was carried out in the form of a critique of post-Hegelian philosophy." Furthermore, the "main purpose" of The German Ideology was "self-clarification."[119] The famous Theses on Feuerbach (1845) fall into place here also as this appears, as Tucker comments, to be the outline for "Part I" of The German Ideology.[120]

Thus the so-called 'middle-works' show a unique blend of methodological and socially concrete concerns. Perhaps the last example of the fluidity which Marx achieved in moving from method to conscious material illustration of method within a social context is to be found in The Poverty of Philosophy (1846-7). That method and content (social context) are being explicitly discussed -- with perhaps emphasis upon the former -- is summarily stated in Marx's "Foreword":

> M. Proudhon has the misfortune of being particularly misunderstood in Europe. In France, he has the right to be a bad economist, because he is reputed to be a good German philosopher. In Germany, he has the right to be a bad philosopher, because he is reputed to be one of the ablest of French economists. Being both German and economist at the same time, we desire to protest against this double error.
>
> The reader will understand that in this thankless task we have often had to abandon our criticism of M. Proudhon in order to criticize German philosophy, and at the same time to give some observations on political economy.[121]

The result, in a chapter entitled "The Metaphysics of Political Economy," is that Marx begins with "Here we are right in Germany! We shall now have to talk metaphysics while talking political economy." Furthermore: "Now metaphysics -- indeed all philosophy -- can be summed up, according to Hegel, in method. We must, therefore, try to elucidate the method of M. Proudhon, . . ."[122]

Never again will Marx be so structurally formal in assigning such an even balance between formal exposition of method and the concrete grounding of method in social reality. As the frequently quoted eleventh thesis on Feuerbach bluntly asserts: "The philosophers have only *interpreted* the world in various ways; the point, however, is to *change* it."[123] From *The Poverty of Philosophy* on, we believe that Marx felt he had indeed "settled accounts" with his "philosophical conscience." Never again would he devote so much laborious time to a formal elucidation of method; to "talk metaphysics." He had also, during those middle works, become convinced that "the anatomy of civil society is to be sought in political economy." This meant that he could now abandon (or delay, as priority had shifted) the publication of a "series of distinct, independent pamphlets" on various aspects of social life. This is because "the extent to which political economy itself expressly touches upon these subjects" was recognized to be a full 'extent.' He also recognized both the uniqueness and organic unity of the three ontological and epistemological levels we have described.

From now on Marx would use the mode of production to concretely examine and illustrate the material and dialectical nature and processes of man and society. Thus his 'mature works' -- whether a platform such as the Manifesto of the Communist Party (1847-8),[124] an analysis of contemporary political events such as The Class Struggles in France, 1848 to 1850 (1850),[125] or a comprehensive exposition of the material determinants and dialectical developments of social reality such as Capital (Vol. I, 1867)[126] -- became exemplars of the dialectical unity of theory and practice in that they embody the praxis of historical materialism.

Footnotes - Chapter V

[1] H.B. Acton, What Marx Really Said (N.Y.: Schocken Books, 1967).

[2] Louis Althusser, For Marx, trans. by Ben Brewster (Harmondsworth, Middlesex, England: Penguin Books Ltd., 1969).

[3] Melvin Rader, Marx's Interpretation of History (N.Y.: Oxford University Press, 1979), pp. v-vi. Rader's citation is: "Letter to Engels, August 1, 1856" in Marx/Engels, Werke (Berlin: Dietz Verlag, 1953-1968), Vol. 29, p. 68, which he acknowledges in footnote one on p. v. In the same footnote he continues: "For detailed comment on the differences between Marx and Engels see Norman Levine, The Tragic Deception: Marx Contra Engels (Oxford, Santa Barbara: Clio Press, 1975)."

[4] Erich Fromm, Marx's Concept of Man, a vol. in Milestones of Thought in the History of Ideas (N.Y.: Frederick Ungar Publishing Co., 1966), p. 9. This is also noted in Rader, Marx's Interpretation of History, p. 12.

[5] At least three major influences have affected the development of our model of mode III.

That we must simultaneously think in terms of ontology and epistemology at various levels of reality -- as we shall see shortly 'dialectics' is the key concept here -- is a realization which first evolved from a reading of Ed Kozakiewicz, "Dialectical Materialism" (unpublished seminar paper, University of Alberta, 1974).

Recognition of the "structural principle" of "organic totality" and, more importantly, the necessity of seeing Marx as simultaneously working with several "models" in his work, were both the result of reading Melvin Rader, Marx's Interpretation of History. The noted citations on this point are taken from pp. xxi and xxii of that work. It must be stressed, however, that Rader does not argue for as complete an interpenetration of frameworks as we would like. See pp. xiii - xxiii ["Introduction"] for an outline of the plan of Rader's excellent work. As he states, his book "explores Marx's use of models in his interpretation of history" (p. xxiii).

Finally, and without question of greatest significance, is the influence of Dr. H. Garfinkle of the University of Alberta. Although there are notable differences in our interpretations, the great heuristic and analytic utility of approaching Marx's thought from the categories, specifically, of 'means of subsistence,' 'relations of reproduction,' 'means of production,' and 'social relationships' is an invaluable and we feel absolutely essential component of our perspective -- one wholly creditable to Dr. Garfinkle. However, it is important to emphasize that the development of these concepts, and the conclusions reached, do not necessarily agree with the method and thrust of his work.

[6] Some structural aspects of our discussion of dialectical materialism are indebted to the analysis undertaken in Kozakiewicz, "Dialectical Materialism." Although our analysis is extended and qualitatively different, the inspiration for the general approach is the result of reading Kozakiewicz.

[7] Definition:

> "ENERGY LEVELS. An atom as a whole, or an individual nucleus, can exist only in certain definite states characterized by the energy of the state. Thus, for each different atom or nucleus, there exists a series of energy levels corresponding to these permissible states. The lowest stable energy level of an atom or nucleus is referred to as the ground state; atoms or nuclei at higher energy levels than the ground state are said to be excited."

From: E.B. Uvarov and D.R. Chapman, The Penguin Dictionary of Science, revised for the third and fourth editions by Alan Isaacs (first Schocken ed.; N.Y.: Schocken Books, 1972), p. 133.

[8] Kozakiewicz, "Dialectical Materialism."

[9] Rader, Marx's Interpretation of History, pp. 88-89.

[10] Karl Marx and Frederick Engels, The Holy Family, or Critique of Critical Criticism. Against Bruno Bauer and Company, trans. from the German by Richard Dixon and Clemens Dutt (2nd., revised ed.; Moscow: Progress Books, 1975), p. 149. Italics in original.

[11] Karl Marx, On the Difference Between the Democritean and Epicurean Philosophy of Nature, in Karl Marx and Frederick Engels, Collected Works, Vol. I (London: Lawrence & Wishart, 1975), p. 38.

[12] Ibid., p. 73. Italics in original.

[13] Karl Marx, Theses on Feuerbach (version edited by Engels), in Marx and Engels, Collected Works, Vol. V (1976), p. 6. Italics in original.

[14] Karl Marx, Capital: A Critical Analysis of Capitalist Production, Vol. I, trans. from the German edition by Samuel Moore and Edward Aveling and edited by Frederick Engels (Moscow: Progress Publishers), p. 292. In a footnote, Marx acknowledges that the specific analogy is to chemistry.

[15] Karl Marx, "Draft of New Preface" to *Difference Between The Democritean and Epicurean Philosophy of Nature*, in Marx and Engels, *Collected Works*, Vol. I (1975), p. 106. Phrase in brackets [] indicates a passage crossed out in the manuscript, which we are including. Asterisk indicates another crossed out phrase which we are not including as it is tangental to our point.

[16] It is here that Engels succinctly and modestly evaluates his place and role in the Marx/Engels corpus of works and ideas. In referring to his share in the development and elaboration of what he simply terms "materialism," Engels makes this personal statement:

> "here I may be permitted to make a personal explanation. Lately repeated reference has been made to my share in this theory, and so I can hardly avoid saying a few words here to settle this particular point. I cannot deny that both before and during my forty years' collaboration with Marx I had a certain independent share in laying the formulations, and more particularly in elaborating the theory. But the greater part of its leading basic principles, particularly in the realm of economics and history, and above all, its final, clear formulation, belong to Marx. What I contributed -- at any rate with the exception of a few special studies -- Marx could very well have done without me. What Marx accomplished I would not have achieved. Marx stood higher, saw farther, and took a wider and quicker view than all the rest of us. Marx was a genius; we others were at best talented. Without him the theory would not be what it is today. It therefore rightly bears his name."

Frederick Engels, *Ludwig Feuerbach and the Outcome of Classical German Philosophy*, ed. by C.P. Dutt (London: Martin Lawrence, 1934), pp. 52-53.

[17] Editor's "Preface" to Engels, *Ludwig Feuerbach*, p. 7.

[18] Engels, *Ludwig Feuerbach*, p. 53. Our emphasis.

[19] Ibid., p. 54. Our emphasis.

[20] Ibid., pp. 56-57. Our emphasis.

[21] Letter to Marx, July 14, 1858, in Karl Marx and Frederick Engels, *Selected Correspondence* (Moscow: Foreign Languages Publishing House; Published in Great Britain by Lawrence Wishart Ltd., London, 1956), p. 131.

[22] A concise glimpse into Engels' scientific sophistication can be found in his letter to Marx, May 30, 1873 in Marx and Engels, Selected Correspondence, pp. 342-343. Engels' most comprehensive statement on the dialectics of inorganic nature are, of course, to be found in Frederick Engels, Dialectics of Nature, trans. and ed. by Clemens Dutt with a Preface by J.B.S. Haldane (N.Y.: International Publishers, 1940). Chapter II ("Dialectics" -- pp. 26-34) is of particular significance in that it is concise and dialectics is clearly recognized in its ontological and epistemological forms, as are the material and dialectical aspects of reality at all levels of existence from inorganic nature to man. Chapter VII (pp. 152-270) consists of "Notes" to this work and contains a wealth of pointed statements on the unequivocal ontological and epistemological reality and utility of dialects and materialism.

Further, in Frederick Engels, Anti-Duhring: Herr Eugen Duhring's Revolution in Science (3rd. ed.; Moscow: Foreign Languages Publishing House, 1962), we are offered this reflection by the mature Engels on both the centrality of natural science in his thought and the evolution of his scientific knowledge. The comments are from his Sept. 23, 1885, "Preface" to the second edition. Implied throughout is Marx's sympathy with the view expressed.

> "Marx and I were pretty well the only people to rescue conscious dialectics from German idealist philosophy and apply it in the materialist conception of nature and history. But a knowledge of mathematics and natural science is essential to a conception of nature which is dialectical and at the same time materialist. Marx was well versed in mathematics, but we could keep up with the natural sciences only piecemeal, intermittently and sporadically. For this reason, when I retired from business and transferred my home to London, thus enabling myself to give the necessary time to it, I went through as complete as possible a 'moulting,' as Liebig calls it, in mathematics and the natural sciences, and spent the best part of eight years on it. . . .
>
> It goes without saying that my recapitulation of mathematics and the natural sciences was undertaken in order to convince myself also in detail -- of what in general I was not in doubt -- that in nature, amid the welter in innumerable changes, the same dialectical laws of motion force their way through as those which in history govern the apparent fortitousness of events; the same laws as those which similarily form the thread running through the history of the development of human thought

> and gradually rise to consciousness in the mind of man; the laws which Hegel first developed in all-embracing but mystic form, and which we made it one of our aims to strip of this mystic form and to bring clearly before the mind in their complete simplicity and universality. It goes without saying that the old natural philosophy -- in spite of its real value and the many fruitful seeds it contained -- was unable to satisfy us." (pp. 16-18)

[23] Letter to Kugelmann, March 6, 1868, in Marx and Engels, Selected Correspondence, p. 240. Italics in original.

[24] Letter to Marx, June 16, 1867, in Marx and Engels, Selected Correspondence, p. 227. Italics in original.

[25] Letter to Engels, June 22, 1867, in Marx and Engels, Selected Correspondence, p. 229. Italics in original.

[26] In continuing with the level of organic life in the form of evolutionarily advanced mammals, it is not thereby implied that there are not many more ontological and epistemological levels one could elucidate. Indeed, our three levels are mere conveniences for grasping the core of mode III. As Engels, in an "Appendix" to Ludwig Feuerbach, recognizes, the optimal goal is to comprehend the gradations of the world -- from inorganic matter to human consciousness -- within the framework of evolution. Specifically, his hope is to see "the main processes of nature . . . explained and traced back to natural causes" (p. 78).

Engels rejoices that during the first half of the nineteenth century "empirical natural science made such an advance and achieved such brilliant results . . . [that] . . . natural science itself was, through the proof of the inter-relation existing in nature itself between the various spheres of investigation (mechanics, physics, chemistry, biology, etc.), transformed from an empirical into a theoretical science and, by the integration of the results achieved, into a system of materialistic knowledge of nature." (p. 76) Many advances contributed to this, but three were of "decisive importance": the law of conservation of energy; the discovery of the cell; the theory of evolution (pp. 76-78). In consequence:

> "Today, the whole of nature is laid open before us as a system of inter-connections and processes which have been, at least in their main features, explained and comprehended. Indeed, the materialist outlook on nature means no more than simply conceiving nature just as it exists without any foreign mixture, . . ." (p. 79)

[27] Here, we are not concerned with other -- 'non-traumatic,' for lack of a better term -- qualitative changes such as fetus to mammal, infancy to maturity, etc.

[28] We have seen, in footnote 26, that Engels is quite clear about the chemical basis of organic existence.

[29] Yet, even this assertion is reductionist. Mode III holds that the basis of organic life is inorganic material, and at some point in the past life 'evolved' from inorganic material. Furthermore, simple organisms have the capacity to convert inorganic materials into organic forms. This again illustrates the constant need to recognize the dialectical inter-penetration of our three levels [using the integrative concept of 'organic unity'] while simultaneously recognizing that our ontological and epistemological levels are indeed qualitatively different and must be recognized as such.

[30] Karl Marx, *Economic and Philosophic Manuscripts of 1844*, in Marx and Engels, *Collected Works*, Vol. III (1975), pp. 276-277, *passim*. Italics in original.

[31] Karl Marx, "Reflections of a Young Man on the Choice of a Profession," in Marx and Engels, *Collected Works*, Vol. I (1975), p. 3.

[32] Karl Marx, "Notebooks on Epicurean Philosophy," in Marx and Engels, *Collected Works*, Vol. I (1975), p. 453.

[33] Frederick Engels, "The Part Played by Labor in the Transition From Ape to Man," in Frederick Engels, *The Origins of the Family, Private Property and the State (in the Light of the Researches of Lewis H. Morgan)*, Introduction and Notes by Eleanor Burke Leacock (N.Y.: International Publishers, 1972).

[34] Engels, *The Origins of the Family*, p. 71.

[35] Editor's "Introduction" in Karl Marx, *Ethnological Notebooks (Studies of Morgan, Phear, Maine, Lubbock)*, transcribed and ed., with an Introduction by Lawrence Krader (Assen, Netherlands: Van Gorcum, 1972), p. 1.

[36] Karl Marx and Frederick Engels, *The German Ideology (Part One, with selections from Parts Two and Three, together with Marx's "Introduction to a Critique of Political Economy")*, ed. and with an Introduction by C.J. Arthur (N.Y.: International Publishers, 1970), p. 48.

[37] Ibid., p. 49. Italics in original.

[38] Ibid., p. 42. Italics in original.

[39] Ibid., p. 42. Italics in original.

[40] Marx, 1844 Manuscripts, pp. 276-277. Italics in original.

[41] Ibid., pp. 275-276. Italics in original.

[42] Ibid., p. 336. Italics in original.

[43] Ibid., p. 337. Italics in original.

[44] Ibid., p. 276. Italics in original.

[45] Marx and Engels, The German Ideology, p. 49.

[46] Ibid., p. 50.

[47] Marx, 1844 Manuscripts, p. 275.

[48] Marx and Engels, The German Ideology, p. 51. Italics in original.

[49] Ibid., p. 42.

[50] Marx, 1844 Manuscripts, p. 303. Italics in original.

[51] Ibid., p. 304. Italics in original.

[52] Man, to be 'man,' must of course achieve consciousness. The actual, material, transition from level two to level three necessitates this ontological transformation; thus consciousness is an anthropological concept.

[53] Karl Marx, Grundrisse: Foundations of the Critique of Political Economy (rough draft), translated, with a Foreword, by Martin Nicolaus, a vol. in The Pelican Marx Library, general ed. Quintin Hoare (London: Allen Lane, a division of Penguin Books Ltd., 1973), p. 84. Italics in original. The bracketed phrase -- i.e. ["political animal"] -- is the editor's translation from the Greek. Elsewhere, Maurice Dobb translates as [Zoon politikon -- social animal]. (See Marx, Contribution to the Critique of Political Economy, p. 189.) The latter seems to be closer to Marx's intent.

[54] Marx, Grundrisse, p. 84. Italics in original.

[55] Karl Marx, A Contribution to the Critique of Political Economy, Introduction by Maurice Dobb (N.Y.: International Publishers, 1970), p. 20.

[56] Marx, Grundrisse, p. 85. Here we may also note the crucial anthropological role of the hand as noted by Engels in his essay The Part Played by Labour in the Transition From Ape to Man, in Engels, The Origin of the Family, pp. 251-264.

[57] Marx, Contribution to a Critique of Political Economy, p. 20.

[58] Marx, Capital, Vol. I, p. 174.

[59] Marx, Contribution to a Critique of Political Economy, p. 36.

[60] Marx, Capital, Vol. I, p. 179. The "simple, elementary factors" of labour Marx refers to are succinctly defined five pages earlier:

> "The elementary factors of the labour-process are 1, the personal activity of man, i.e. work itself, 2, the subject of that work, and 3, its instruments." (p. 174)

[61] Ibid., p. 175.

[62] Ibid., p. 174.

[63] Marx, Contribution to a Critique of Political Economy, p. 29. Italics in original.

[64] Marx, Capital, Vol. I, p. 51.

[65] Ibid., p. 64.

[66] Ibid., p. 46.

[67] Letter to Engels, August 24, 1867, in Marx and Engels, Selected Correspondence, p. 232. Italics in original.

[68] Marx, Capital, Vol. I, pp. 44-45.

[69] Ibid., p. 46.

[70] Ibid., pp. 174-175.

[71] Marx, Grundrisse, p. 86. Italics in original.

[72] Marx, Capital, Vol. I, p. 46.

[73] Marx, Contribution to a Critique of Political Economy, p. 36. Italics in original.

[74] Marx, Capital, Vol. I, p. 48.

[75] Ibid., p. 547.

[76] The same point is concisely made in Contribution to a Critique of Political Economy. We cite the following brief passage as it clearly reveals how 'property' is not in any way inherently an undesirable entity, but has become one through the unique historical conditioning of the term. In reply to the formulations of Smith, Ricardo, Mill, etc., Marx asserts:

> ". . . production is always appropriation of nature by an individual within and with the help of a definite social organization. In this context it is tautological to say that property (appropriation) is a condition of production. But it is quite ridiculous to make a leap from this to a distinct form of property, e.g. private property (this is moreover an antithetical form which, similarily, presupposes non-property as a condition). History has shown, on the contrary, that common property (e.g. among Indians, Slavs, ancient Celts, etc.) is the original form, and in the shape of communal property it plays a significant role for a long time. . . . It is tautological . . . to state that where no form of property exists there can be no production and hence no society either. Appropriation which appropriates nothing is a contradiction in terms." (pp. 192-193. Italics in original.)

[77] David McLellan, Marx's Grundrisse (Paladin ed.; St. Albans, Herts, England: Granada Publishing Limited, 1973), pp. 165; 168.

[78] Marx, German Ideology, p. 53.

[79] Marx, 1844 Manuscripts, p. 314. Italics in original.

[80] Ibid., p. 237.

[81] Marx, Capital, Vol. I, p. 202. Italics in original.

[82] Ibid., p. 354.

[83] Ibid., p. 380.

[84] Ernest Mandel, An Introduction to Marxist Economic Theory (2nd. ed.; N.Y.: Pathfinder Press, 1973), p. 30.

[85] Ibid., p. 30. Italics in original.

[86] Marx, Capital, Vol. I, p. 209.

[87] Marx and Frederick Engels, Manifesto of the Communist Party, in Marx and Engels, Collected Works, Vol. VI (1976), p. 482.

[88] Ibid., p. 482. This phrase is added by Engels in a footnote to the 1888 English edition.

[89] Marx, Contribution to a Critique of Political Economy, pp. 20-21.

[90] Ibid., p. 21.

[91] Ibid., pp. 20-21.

[92] Marx, German Ideology, pp. 46-47. Italics in original.

[93] Engels, Letter to Starkenburg, Jan. 25, 1894, in Marx and Engels, Selected Correspondence, pp. 548-549. Italics in original.

[94] Marx, German Ideology, p. 63.

[95] Marx, The Poverty of Philosophy: Answer to the 'Philosophy of Poverty' by M. Proudhon (Moscow: Progress Publishers, 1955), p. 72.

[96] Marx, Capital, Vol. I, p. 459.

[97] Ibid., pp. 459-460.

[98] Engels, Letter to C. Schmidt, Oct. 27, 1890, in Marx and Engels, Selected Correspondence, p. 505.

[99] Ibid., pp. 506-507.

[100] Marx, German Ideology, p. 108.

[101] Marx, Grundrisse, p. 87.

[102] Ibid., p. 85. Italics in original.

[103] Marx, Letter to P.V. Annenkov, Dec. 28, 1846, in Marx and Engels, Selected Correspondence, p. 40. Italics in original.

[104] Karl Marx, The Eighteenth Brumaire of Louis Bonaparte, in Marx and Engels, Collected Works, Vol. XI (1979), p. 103.

[105] Marx, Thesis on Feuerbach, p. 6.

[106] Ibid., p. 7.

[107] Ibid., p. 8. Italics in original.

[108] Karl Popper, "What is Dialectic?", Mind, Vol. 49, N.S. (1940), p. 424. Italics in original.

[109] Karl Marx, *Contribution to the Critique of Hegel's Philosophy of Law*, in Marx and Engels, *Collected Works*, Vol. III (1975), p. 123. The specific context of this comment is Marx's reference to Hegel's view that assembly delegates are to interpret the imperatives of the 'idea' of state, rather than respond to the concrete demands of the electorate.

[110] Ibid., p. 114.

[111] Ibid., p. 116.

[112] Karl Marx, *On the Jewish Question*, in Marx and Engels, *Collected Works*, Vol. III (1975).

[113] Karl Marx, *Contribution to the Critique of Hegel's Philosophy of Law. Introduction*, in Marx and Engels, *Collected Works*, Vol. III (1975), p. 182. Italics in original.

[114] Ibid., p. 183.

[115] Marx, *1844 Manuscripts*, p. 333. Italics in original.

[116] Ibid., p. 333. Italics in original.

[117] Ibid., p. 231. Italics in original.

[118] Marx, *A Contribution to the Critique of Political Economy*, pp. 19-20. Our emphasis.

[119] Ibid., p. 22.

[120] Robert C. Tucker, ed., *The Marx-Engels Reader* (N.Y.: W.W. Norton & Company, Inc., 1972), p. 110.

[121] Marx, *The Poverty of Philosophy*, p. 25.

[122] Ibid., p. 90.

[123] Marx, *Theses on Feuerbach*, p. 8. Italics in original.

[124] Marx and Engels, *Manifesto of the Communist Party*.

[125] Karl Marx, *The Class Struggles in France, 1848 to 1850*, (Moscow: Progress Publishers, 1972).

[126] Marx, *Capital*, Vol. I. Yet, even in this, his most mature and painstakingly precise work, Marx is fully aware of the role of theory and is not blinded to the possibility of idealism within his exposition in *Capital* (Vol. I). Consider his comments in a letter to Engels, Aug. 24, 1867:

> "As for Chapter IV, I sweated plenty ascertaining the things themselves; i.e. their interconnection. Then, when that had been done, Blue Books came flying in between one after the other as I was whipping the chapter into final shape and I was delighted to find my theoretical results fully confirmed by the facts." (Marx and Engels, Selected Correspondence, p. 232)

Uncertainty and doubt are personal characteristics rarely associated with Marx -- and his written works provide little evidence of their existence. Yet, in perhaps less guarded moments such as his correspondence indicates, we see perhaps more clearly the constant attempts of Marx to come to material grips with his theoretical formulations.

CHAPTER VI

CONCLUSION: HISTORIOGRAPHIC CRITERIA OF MODE III; OUTLINE OF MAJOR LIMITATIONS

To this point we have presented a picture of mode III as a fully successful synthesis of modes I and II, and that argument has been cast in a predominantly theoretical form. To complete our analysis we now: (a) Examine the historiography of mode III as illustrated in one of Marx's own works to more concretely illuminate the strength of that mode. (b) Having so elucidated mode III, we must recognize that to point we have emphasized the positive side of mode III's resolution of the antipathies of modes I and II. However, importantly, the synthesis that is mode III is generating its own antithetical elements, and mode III's limitations are slowly coming to light. Some of these limitations we will note.

This second objective is not, of course, intended to take anything away from Marx's accomplishments or the utility of mode III. Indeed our dissertation so far has culminated in what amounts to both an explication and a 'defense' of mode III, and an outline for a comprehensive historiography which we believe greatly expands the methodological criteria of adequacy for historical works. Our objective in (a) is to make even more clear mode III's historiographic strengths, and indeed this would constitute a logical stopping point in our exposition. Never-the-less -- in full recognition that the challenges to modern historiography presented so far are perhaps quite controversial enough and will cast us as antagonists in most methodological debates with historians -- we will press but a small bit further. We will isolate what we perceive to be some major problems in the mode III synthesis; problems whose resolutions must await further and detailed investigation -- a task which is enormous and falls outside the scope of this analysis. [And, even here we will try the reader's indulgence when we hint, very summarily, at some possible avenues toward resolutions.]

Thus this final chapter will clearly lay down what may be termed the methodological criteria for mode III historiography; these will be illustrated through one of Marx's own historical works; some major limitations of the mode III synthesis will be briefly outlined simultaneous with very brief speculations on clues to resolutions. As the function of this chapter is merely to provide further illustration and offer speculative extrapolations, we will be as brief as possible.

HISTORIOGRAPHIC CRITERIA AND AN ILLUSTRATIVE EXAMPLE

Marx's *The Class Struggles in France 1848-1850*[1] will serve as our 'exemplar' of mode III historiography. Virtues of the work include brevity and clarity in the analysis of an extremely complex historical event -- one which to this day fascinates scholars. Furthermore Marx himself undertook the work, written between January and November of 1850, with the objective of applying his historiographic model to a concrete situation. As Engels' 1895 "Introduction" to the republication of Class Struggles begins:

> The work here republished was Marx's first attempt to explain a section of contemporary history by means of his materialist conception, on the basis of the given economic situation. In the Communist Manifesto, the theory was applied in broad outline to the whole of modern history; in the articles by Marx and myself in the Neue Rheinische Zeitung it was constantly used to interpret political events of the day. Here [in Class Struggles] on the other hand, the question was to demonstrate the inner causal connection in the course of a development which extended over some years, . . .[2]

Furthermore, as Engels notes, Class Struggles "later brilliantly stood the double test applied by Marx himself."[3]

Thus Class Struggles is a very practical application of mode III historiography. Analysis should serve the heuristic objective of revealing mode III's general methodological tenets [which we summarized previously] in their distinct historiographic form [while illustrating these historiographic criteria in an analysis of a context-specific historical situation].

MODE III HISTORIOGRAPHIC CRITERIA

Perhaps the most succinct summation of any 'guidelines' to the formulation of mode III historiographic criteria which will not violate that mode's complexity is the tenet that both the object and method of historical inquiry must be recognized as simultaneously fully material and dialectical. Mode III offers the following minimal historiographic criteria:

(i) The Historical Object of Study Must be Recognized as Fully Material

On February 23, 1848, public demonstrations and the erection of barricades in the center, west and east of Paris heralded events which included the fall of Louis Philippe [the so-called 'July Monarchy'], the establishment of a Republican France, the Parisian bloodbath of June 23 to 26, 1848, and the establishment of a tense domestic stability in France which culminated in the December 2, 1851 coup d'etat of Louis Napoleon followed by the subsequent replacement of the Second Republic with the Second Empire. Class Struggles deals with the period February, 1848 to autumn of 1850. [Originally, what is now Class Struggles appeared in serialized form: The analysis of the period February, 1848, to March 1850, appeared in the January, February and March, 1850, issues of the Neue Rheinische Zeitung, Politisch - Ökonomische Revue. The analysis of the period March to autumn, 1850, appeared in the final -- autumn, 1850 -- issue of the Neue Rheinische Zeitung. This last installment was written with the assistance of Engels.[4]]

The chaotic, tumultuous, upheavels which characterize this complex, fascinating and destructive (of human lives and property) historical moment all find their existence and explanation in a fully material basis: all these events are manifestations of emerging contradictions within specific modes of production; these contradictions are embodied in the specific form of class struggles. The manifestations of these struggles are fully demonstrable empirically; the dialectical contradictions are fully rooted in the underlying material mode of production which the empirical documents. Thus the events may be understood in their own terms, and neither external influences nor metaphysical abstractions from the material reality need be invoked. Let us illustrate.

Today Gordon Wright writes that "boredom" and socialist "propaganda" can be counted among the causal factors leading to the events of 1848;[5] a century before Wright, Marx notes that with the proclamation of the republic

> . . . all the royalists were transformed into republicans and all the millionaires of Paris into workers. The phrase which corresponded to this imaginary abolition of class relations was _fraternite_, universal fraternization and brotherhood. This pleasant abstraction from class antagonisms, this sentimental reconciliation of contradictory class interests, this visionary elevation above the class struggle, this _fraternite_ was the real catchword of the February Revolution.[6]

It is precisely against such "imaginary abolition" of the underlying material reality of revolt, against such "pleasant abstractions" and "visionary elevation" after the events of February, 1848, that Marx rebelled in his work. All these events find their ontological base in the material reality of class struggles within a mode of production, and all events must be reconciled with that basis as "imaginary" solutions have no place in material reality. Thus the general elections installing the National Assembly which convened on May 4, 1848, showed that

> Universal suffrage did not possess the magic power which republicans of the old school had ascribed to it. They saw in the whole of France, at least in the majority of Frenchmen, _citoyens_ with the same interests, the same understanding, etc. This was their _cult of the people_. Instead of their _imaginary_ people, the elections brought the _real_ people to the light of day, that is, representatives of the different classes into which it falls. . . . But if universal suffrage was not the miracle-working magic wand for which the republican worthies had taken it, it possessed the incomparably higher merit of unchaining the

> class struggle, of letting the various middle strata of bourgeois society rapidly get over their illusions and disappointments, of tossing all the sections of the exploiting class at one throw to the apex of the state, and thus tearing from them their deceptive mask, whereas the monarchy with its property qualifications only let certain factions of the bourgeoisie comprise themselves, allowing the others to lie hidden behind the scenes and surrounding them with the halo of a common opposition.[7]

This does not, of course, mean that the election platforms, political agitations, etc. are 'real' only in the sense that they are empirical phenomena. The difference between the 'empirical' of mode I and the 'material' of mode III we have laboriously articulated, and the argument need not be restated. Empirical content retains an atomic, often irreconcilably contradictory, form until it becomes resolved within a dialectical and material base. It is for this reason that Marx criticizes, for example, Louis Blanc's interpretation of the "contradictions" in the National Assembly: Blanc "confuses the language of the struggle on the platform, through the press and the clubs with its real content."[8]

We will not dwell on the dialectic here, but the material historiographic imperative of mode III offers a great challenge to historians -- and great hope. To use the prominent example of Wright again, mode III completely avoids such contradictions as the assertion that 1848 was "a result far out of proportion to the cause."[9] The notion of causality loses all utility unless it is very precise in documenting such "proportion"; but then vague bases such as "boredom" or the "influence" of some ill-defined "propaganda" cannot but yield imprecise correlations. Such is mode III's argument with not only Mr. Wright but with all histories which utilize vague, metaphysical, abstractions.

(ii) A Material Basis Makes Possible Verifiable Propositions and Causal Sequences

With the establishment of a material basis empirical phenomena lose their atomic characteristic [a development which we shall discuss later in the context of dialectics] and ambiguity is removed. Materialism always strives toward a precise testing of both the very existence of that material basis and its heuristic utility. In mode III, the material basis is obviously the mode of production and class antagonisms are relations which correspondingly necessitate an economic explanatory context.

About one thing we must be clear: the necessary recourse to a predominantly philosophical manner of exposition in discussion of mode III's insistence upon a fully material basis for historical reality may lead some to the conclusion that such laborious distinctions, as for example the profound differences between empiricism and materialism, are but another variety of the same "sophism" which Marx was so quick to accuse 'idealistic' philosophers of practicing. The exact opposite is the case as mode III is unequivocal and strikingly bold in asserting clear causal connections and testable propositions. Causal sequences are precise and not in any manner relativistic as they are firmly rooted in an economic explanatory framework (which is itself wholly embodied in a more general mode of production). Witness:

> The devastation of trade and industry *caused* by the economic epidemic *made* the autocracy of the finance aristocracy still more unbearable. . . . In Paris the industrial crises had, moreover, the *particular result* of throwing a multitude of manufacturers and big traders, who under the existing circumstances could no longer do any business in the foreign market, onto the home market. They set up large establishments, the competition of which ruined the small *epiciers* and *boutiquiers en masse*. *Hence* the innumerable bankruptcies among this section of the Paris bourgeoisie, and *hence* their revolutionary action in February.[10]

One cannot but be struck with the clarity of language; one is impressed by the boldness of the assertions; and one is challenged by the clear and unequivocal causal sequence which lays itself out so precisely that it invites its own refutation. Mode III, because it has a material basis, recognizes that its own validity can be challenged by anyone on the basis of the facts.

Contrast the above causal sequence with the analysis of another eminent authority, Pricilla Robertson: after elaborating how under Louis Philippe France was comparatively economically well off, how the lot of the poor was actually improving since the days of Charles X and how Frenchmen possessed liberties which compared very favorably even with England,[11] Robertson concludes that the people who participated in the upheavals of February, 1848, were carried away by the tide of emotion and the whole event was really sort of an accident.[12] How does one cope with such an analysis? -- one does not because there is no real, material, hypotheses to prove or disprove.

Consider further the more precise formulations of another authority, Frederick deLuna:

> What brought down the regime and released social forces previously inert or suppressed was insurrectionary action in Paris resulting from the conjunction of a political and economic crises. Although it is not here suggested that revolution must inevitably result from such a combination, clearly that of 1848 did.[13]

We will quibble over one -- but one very crucial -- word. "Conjunction" of forces implies a parallel development of social forces and also implies some degree of independence of respective movements. The result is analytic imprecision, and a hypothesis which is not fully testable. "Caused," "made," "result" and "hence" -- the linking terms in Marx's above assertion -- stress a clear causal relationship where one factor is independent and the other dependent.

Without specific testable assertions there is no possibility of establishing a clear causal sequence which can be proven or disproven. Thus Class Struggles' reliance upon statistics; thus the clear explication of terms which correspond to fully material entities and categories; thus the clear outlining of both material forces and material categories. The "financial measures" which the Republic employed in the task of "adapting itself to the relations of bourgeois society" are explicitly outlined.[14] "The gradual revolutionizing of the peasants was manifested by various symptoms"[15] which are meticulously listed. After a discussion on the circulation of bank notes between March 15, 1848 and August 6, 1850, we are not left in any doubt as to the material point of the discussion:

> That the bank was thus placed in a position to increase its circulation and therewith its active capital by 123,000,000 francs, or £5,000,000, is striking proof of the correctness of our assertion in an earlier issue that the finance aristocracy has not yet been overthrown by the revolution, but has even been strengthened. This result becomes still more evident from the following survey of French bank legislation during the last few years. On June 10, 1847, . . . [etc.].[16]

All this precision is possible because the frame of reference is very clear and unambiguous -- because it is fully material. The economic context, again, is what makes it so and Class Struggles is wholly explicit in delineating that material context. Thus Class Struggles begins with economic causes, ends with economic causes ("the status quo [will now continue] . . . until the economic relations themselves have again reached the point of development where a new explosion blows into the air all these squabbling parties with their constitutional republic"[17]), and on every page in between the economic frame of reference is fully explicit. Whether outlining the economic basis for the class interests comprising the mode of production for either the French bourgeoisie[18] or the peasants,[19] the material basis allowing an investigation and testing of the content of Class Struggles is always explicit.

(iii) Principles of Historical Development Must Similarly be Articulated and Ultimately be Testable

The preceding discussion must not, of course, be interpreted in any way as a demand for 'scientism' à la mode I. Remembering that the mode of production is both a general [applying to all epochs] and specific [applying to the content and dynamics of one epoch in particular] material [because it is based on the ontological actuality of social reality as it exists] category, we recognize that we must make a distinction between 'principles' and 'rules.' That is, the specific manifestations a specific mode of production exhibits are specific to that mode. However, the general interactions and components of a mode of production are common to all modes. Put formally, the general material proposition (mode of production as a material category) provides the necessary conditions into which the specific material proposition (the particular mode of production as a specific material content) provides the sufficient conditions for both development and analysis. This intricate relationship must be stressed:

> The development of the industrial proletariat is, in general, conditioned by the development of the industrial bourgeoisie. Only under its rule does the proletariat gain that extensive national existence which can raise its revolution to a national one, and does it itself create the modern means of production, which become just so many means of its revolutionary emancipation. Only its rule tears up the material roots of feudal society and levels the ground on which a proletarian revolution is possible. French industry is more developed and the French bourgeoisie more revolutionary than that of the rest of the Continent. But was not the February Revolution levelled directly against the finance aristocracy? This fact proved that the industrial bourgeoisie did not rule France. The industrial bourgeoisie can rule only where modern industry shapes all property relations to suit itself, and industry can win this power only where it has conquered the world market, for national bounds are inadequate for its development. But French industry, to a great extent, maintains its command even of the national market only through a more or less

> modified system of prohibitive duties. While, therefore, the French proletariat, at the moment of a revolution, possesses in Paris actual power and influence which spur it on to a drive beyond its means, in the rest of France it is crowded into separate, scattered industrial centers, being almost lost in the superior numbers of peasants and bourgeois. The struggle against capital in its developed, modern form, in its decisive aspect, the struggle of the industrial wage-worker against the industrial bourgeois, is in France a partial phenomenon, which after the February days could so much the less supply the national content of the revolution, since the struggle against capital's secondary modes of exploitation, that of the peasant against usury and mortgages or of the petty bourgeois against the wholesale dealer, banker and manufacturer, in a word, against bankruptcy, was still hidden in the general uprising against the finance aristocracy. Nothing is more understandable, then, than that the Paris proletariat sought to secure the advance of its own interests side by side with those of the bourgeoisie, instead of enforcing them as the revolutionary interests of society itself, that it let the red flag be lowered to the tricolour. The French workers could not take a step forward, could not touch a hair of the bourgeois order, until the course of the revolution had aroused the mass of the nation, peasants and petty bourgeois, standing between the proletariat and the bourgeoisie, against this order, against the rule of capital, and had forced it to attach itself to the proletarians as their protagonists. The workers could buy this victory only through the tremendous defeat in June.[20]

We must therefore be very careful not to lapse into positivism and treat the 'testing' of any single assertion as the only criterion for deciding the validity of the material mode of production as an ontologically valid category. Engels, for example, admits several errors in his and Marx's views on the events of 1848. Contrary to their analysis, the time was in fact not ripe for "elimination of capitalistic production"; they did not fully appreciate that the "capitalistic basis" in 1848 "still had great capacity for expansion"; upon reflection it is apparent that between 1848 and 1885 history has "completely transformed the conditions under which the proletariat has to fight. The mode of struggle of 1848 is today [1895] obsolete in every respect."[21]

Does this, however, negate the validity of mode III's perspective and method? It does not if the sufficient conditions do not contradict -- if they merely qualify -- the general conditions.

One of the great virtues of mode III, we recall, is the abolition of methodological dogmatism without an attendant tolerance for imprecision in method. Thus the necessary conditions for the acceptance of the mode of production as a fully material concept [which chapter five articulated] are recognized to be principles which must in the final analysis be verified. But such principles, because they are material, are always manifested in specific forms and therefore the constant re-interpretation of the "correspondence" (to use a favorite term of Marx's) between the general category and the specific phenomenon is essential. It is only with the introduction of ad hoc hypotheses that the fundamental (i.e. 'necessary') conditions for accepting the validity of mode III become violated. Thus fundamental tests for mode III may take the form of, for example, Lenin's Imperialism: The Highest Stage of Capitalism.[22] The crucial question is: are developments in modern, international, economics compatible with the tenets of mode III, or is "correspondence" with these facts impossible?

Neither the issue nor Lenin's success or lack thereof will be pursued here, but the virtue of mode III is precisely that while its material basis invites and makes possible the constant testing of its necessary conditions for acceptance, it is encompassing enough -- in the form of mode of production as a general category -- to serve as a tool to devise a multitude of concrete tests which must then be examined in terms of correspondence to this general category. As Marx asserts:

> If June 23, 1848, was the insurrection of the revolutionary proletariat, June 13, 1849, was the insurrection of the democratic petty bourgeois, each of these two insurrections being the *classically pure* expression of the class which had been its vehicle.[23]

And:

> Public credit and private credit are the economic thermometers by which the intensity of a revolution can be measured. *The more they fall, the more the fervour and generative power of the revolution rises.*

However we do not -- to use an analogy from mode I -- live in a 'frictionless universe.' Thus it is difficult to isolate a "classically pure" instance and Marx immediately notes

> Only in Lyons did it come to an obstinate, bloody conflict. Here, where the industrial bourgeoisie and the industrial proletariat stand directly opposed to one another, where the workers' movement is not, as in Paris, included in and determined by the general movement, June 13, in its repercussion, lost its original character. Wherever else it broke out in the provinces it did not kindle fire -- . . .[25]

Furthermore, it is precisely the manipulation of credit which was a major concern of the Provisional Government and the state and the commercial financiers: "Public credit and private credit were naturally shaken."[26] "The Provisional Government wanted to strip the republic of its anti-bourgeois appearance. And so it had, above all, to try to peg the exchange value of this new form of state, its quotation on the Bourse. Private credit necessarily rose again, . . ."[27] We see that:

> Directly threatened not only in its rule but in its very existence by the February Revolution, the Bank tried from the outset to discredit the republic by making the lack of credit general. It suddenly stopped the credits of the bankers, the manufacturers and the merchants. As it did not immediately call forth a counter-revolution, this manoeuvre necessarily reacted on the Bank itself. The capitalists drew out the money which they had deposited in the vaults of the Bank. The possessors of bank notes rushed to the pay office in order to exchange them for gold and silver.
>
> The Provisional Government could have forced the Bank into bankruptcy without forcible interference, in a legal manner; it would only have had to remain passive and leave the Bank to its fate. The bankruptcy of the Bank would have been the deluge which in a trice would have swept from French soil the finance aristocracy, the most powerful and dangerous enemy of the republic, the golden pedestal of the July monarchy. And once the Bank was bankrupt, the bourgeoisie itself would have had to regard it as a last desperate attempt at rescue, if the government had formed a national bank and subjected national credit to the control of the nation.
>
> The Provisional Government, on the contrary, fixed a compulsory quotation for the notes of the Bank. It did more. It transformed all provincial banks into branches of the Banque de France and allowed it to cast its net over the whole of France. Later it pledged the state forests to the Bank as a guarantee for a loan that it contracted from it. In this way the February Revolution directly strengthened and enlarged the bankocracy which it should have overthrown.[28]

Thus we can appreciate that the complexity of social reality can be grasped without loss of precision and with criteria for testing the validity of the material basis of our third mode of inquiry.

(iv) The Historical Moment Cannot be Captured in Isolation from Dialectical Historical Process

Further, mode III recognizes that inherent in social reality are processes yielding qualitative changes. [It is here, of course, that the full necessity of the mode of production as a general material category, found in all epochs, becomes evident -- as the specific context varies from epoch to epoch.] The centrality of dynamic, qualitative, change is so foremost in mode III that Class Struggles begins by unequivocally emphasizing that it is the 'process' of events -- the process within which the period and events covered are but one dynamic link -- that is to be emphasized. The significance of the events beginning in February, 1848, centers on an emergence, not an existent clear delineation, of the class lines and the contradictions inherent in the capitalist mode of production. To misconstrue the process within which these events occur is to misunderstand the events themselves.

> With the exception of only a few chapters, every more important part of the annals of the revolution from 1848 to 1849 carries the heading: Defeat of the revolution!
>
> What succumbed in these defeats was not the revolution. It was the pre-revolutionary traditional appendages, results of social relationships which had not yet come to the point of sharp class antagonisms -- persons, illusions, conceptions, projects from which

> the revolutionary party before the February Revolution was not free, from which it could be freed not by the victory of February, but only by a series of defeats.
>
> In a word: the revolution made progress, forged ahead, not by its immediate tragicomic achievements, but on the contrary by the creation of a powerful, united counter-revolution, by the creation of an opponent in combat with whom, only, the party of overthrow ripened into a really revolutionary party.
>
> To prove this is the task of the following pages.[29]

The understanding of events within the context of a dialectically unfolding historical process is synonymous with the grasp of history itself. That perspective develops the historical depth of vision which Engels refers to in his "Introduction" to the Class Struggles:

> After the defeats of 1849 we in no way shared the illusions of the vulgar democracy around the future provisional governments in partibus . . . [which] reckoned on a speedy and finally decisive victory of the 'people' over the 'tyrants,' we looked to a long struggle after the removal of the 'tyrants' among the antagonistic elements concealed within this 'people' itself.[30]

The "long struggle" is that process which sees the general material category of the mode of production dialectically resolve itself within its specific material historical context -- in this case the capitalist mode of production. Thus the 'historical moment' must not and cannot be isolated from the 'historical process.' However, if we may call this the dimension of 'time' (to use a wholly inadequate term), there is also a 'geographical' (to use an even more inadequate term) dimension which is fully dialectical and must be fully recognized as another dimension within which the specific historical moment must be understood.

Marx is clear in elaborating this contextual reference as a necessary criterion for any adequate historiography. National events are understood within the context of very specific class antagonisms and world events are the context of generalized class antagonisms which find their echo in relations among nations in a dynamic process within which individual events must be understood. Thus, for example, the conflicts between the French "finance aristocracy" and the "industrial bourgeoisie" were at the expense of the "_petty bourgeoisie_ of all gradations, and the _peasantry_ also, [who] were completely excluded from political power. Finally, in the official opposition or entirely outside the _pays legal_, there were the _ideological_ representatives and spokesmen of the above classes, their servants, lawyers, doctors, etc., in a word: their so-called _men of talent_."[31] The shifting alliances and recurring antagonisms within and between these classes contributed to domestic chaos, but class conflicts cannot be fully isolated within national borders and the domination of the bourgeoisie directly effected foreign policy in concrete ways:

> _Rien pour la gloire_! Glory brings no profit! _La paix partout et toujours_! War depresses the quotations of the three and four per cents! the France of the Bourse jobbers had inscribed on her banner. Her foreign policy was therefore lost in a series of mortifications to French national sentiment, which reacted all the more vigorously when the rape of Poland was brought to its conclusion with the incorporation of Cracow by Austria, and when Guizot came out actively on the side of the Holy Alliance in the Swiss _Sonderbund_ war. The victory of the Swiss liberals in this

> mimic war raised the self-respect of the bourgeois opposition in France; the bloody uprisings of the people in Palermo worked like an electric shock on the paralyzed masses of the people and awoke their great revolutionary memories and passions.[32]

These international events, however, must be reconciled with even larger world events which dialectical materialism recognizes have concrete effects and materially form part of the dynamics of the historical moment and process. Marx reminds us that

> The eruption of the general discontent was finally accelerated and the mood for revolt ripened by two economic world events.
>
> The potato blight and the crop failures of 1845 and 1846 increased the general ferment among the people. The dearth of 1847 called forth bloody conflicts in France as well as on the rest of the Continent. . . .
>
> The second great economic event which hastened the outbreak of the revolution was a general commercial and industrial crisis in England. Already heralded in the autumn of 1845 by the wholesale reverses of the speculators in railway shares, staved off during 1846 by a number of incidents such as the impending abolition of the corn duties, the crisis finally burst in the autumn of 1847 with the bankruptcy of the London wholesale grocers, on the heels of which followed the insolvencies of the land banks and the closing of the factories in the English industrial districts. The after-effect of this crisis on the Continent had not yet spent itself when the February Revolution broke out.[33]

Thus we quickly realize that the dialectical interactions of events over 'time' and 'geography' play a crucial role and must be incorporated in any historical account. This is not a 'simple' correlation, as the interactions are dialectical and must be recognized in their often apparently contradictory forms. But all these relations are material and there is absolutely no metaphysical or idealistic or relativistic vestage in such an analysis. The ultimate key to finally effecting a coherent history is realizing that such relations, because they are dialectical, can have their contradictions resolved within a dialectical framework. Thus, in addition to incorporating process over 'time,' and process over 'geography,' the third dimension to ensuring that the historical moment is not captured in isolation from dialectical historical process is the use of the dialectic to resolve apparent contradictions in the (historical) data. That Marx so skilfully achieves this is perhaps the ultimate significance of his method -- in terms of its technical, formal, methodological achievement. The point is crucial enough to warrant the label of a separate historiographic criterion.

(v) Apparent Contradictions Must be Resolved Through the Dialectic

We may perhaps best appreciate the force of the mode III synthesis by dwelling on some of the seemingly contradictory and often apparently illogical events which have been documented by -- and have sometimes troubled and confused -- some authorities on the 1848 Revolution, and recasting these in the synthesizing light of the mode III material dialectic.

We may begin by noting Gordon Wright's comment that

> The revolution that destroyed the regime of Louis Phillipe has often been called a result without a cause. A more appropriate phrase would describe it as a result far out of proportion to the cause. Frenchmen were not being oppressed

> or tyrannized; the government was not confronted by bankruptcy or undermined by a powerful subversive movement plotting its overthrow.[34]

This perspective is emphatically not shared by Marx for he, as Engels wrote,

> . . . had first discovered the great law of motion of history, the law according to which all historical struggles . . . are in fact only the more or less clear expression of struggles of social classes . . .[35]

Thus it may be true that, as Pricilla Robertson writes, the France of 1848 was in fact a comparatively prosperous nation and Frenchmen possessed, comparatively, an enviable amount of liberty.[36] But one must look to the mode of production to understand the distribution of that wealth. The economic interests of the ruling class (the 'finance aristocracy') were out of harmony with the economic realities of the time. Marx concentrates upon the central, material, point that an 'anachronous' (for lack of a better term) section of society was crippling every effort toward self-determination by the truly productive (within the emerging new economic reality) sector of society (the industrial and petty bourgeoisie).[37] Thus Marx recognized that the very efficient stranglehold that the 'finance aristocracy' had on the economic sphere (through political -- i.e. 'legal' -- safeguards[38]) allowed it to exploit the rest of French society so blatantly and mercilessly that the latter's only truly effective (i.e. 'powerful') sector was left with no recourse but to rebel. ["It was not the French bourgeoisie that ruled under Louis Philippe, but one faction of it: bankers, stock-exchange kings, railway kings, owners of coal and iron mines and forests, a part of the landed proprietors associated with them -- the so-called finance aristocracy."[39]]

That is why, as deLuna documents, the barricades went up in both the working class and the petty bourgeoisie districts of Paris in February.[40] This solidarity between the petty bourgeoisie and the working class -- which was to prove to be very short-lived -- was the perfectly logical result of the material relations within French society.

We note that the petty bourgeoisie won a republic for itself, yet before February 1848, deLuna points out, republicanism had little *de facto* empathy for the lot of the poorest classes: the peasants and the workers.[41] For Marx, this does not present a dilemma. The illusion of common interests between the workers and the petty bourgeoisie resulted in the "alliance"[42] against the 'finance aristocracy.' The workers' contribution to that struggle put them into a position where they could demand certain concessions which the bourgeois government was hesitant to grant.

> The first act in the life of the Provisional Government was an attempt to escape . . . [from the workers' demands] by an appeal from intoxicated Paris to sober France. Lamartine disputed the right of the barricade fighters to proclaim a republic on the ground that only the majority of Frenchmen had that right; . . .
>
> Up to noon of February 25 the republic had not yet been proclaimed; on the other hand, all the ministries had already been divided among the bourgeois elements of the Provisional Government and among the generals, bankers and lawyers of the *National*. But the workers were determined this time not to put up with any bamboozlement like that of July 1830. They were ready to take up

> the fight anew and to get a republic by force of arms. With this message, Raspail betook himself to the Hotel de Ville. In the name of the Paris proletariat he commanded the Provisional Government to proclaim a republic; if this order of the people were not fulfilled within two hours, he would return at the head of 200,000 men.[43]

Indeed, as deLuna notes, it appears that there was an excellent possibility that right up to the early afternoon of February 24, 1848, the Chamber of Deputies might have accepted the regency of the Duchesse d'Orleans.[44] However, as deLuna continues, the dye was in fact cast on the evening of February 23 when the workers turned to republican politicians for leadership.[45] It was this factor which ultimately resulted in the government's concession to the workers' demand for a republic (even though that demand was met late and with reluctance);[46] and it was this factor which soon gave republicanism such an aura of popular support that -- probably out of fear -- seemingly everyone, as deLuna notes, was a 'republican' shortly after the events of February.[47]

The issue of republicanism is merely the tip of the iceberg, however, and hints at a more general pattern of bourgeois attempts to wrestle full control of the state machinery for itself.

The existence of a struggle for power between workers and the bourgeoisie became evident very early after the 'success' of the 'revolution.' Robertson describes how this manifested itself in the reluctance of the Provisional Government -- at its first meeting in the Hotel de Ville -- to accept "workers' representatives" in the government. Louis Blanc, Ferdinand Flocon, and Albert were shortly accepted as full members of the government; but only after initial reluctance to admit them, followed by the attempt to relegate them to the status of "secretaries" (i.e. 'consultants') rather than as full members of the Provisional Government.[48]

Indeed, one wonders what the political course of events would have been had the "workers' representatives" been successfully excluded from the Provisional Government. The government did not want to set up an immediate republic -- as we have noted -- and it was in fact pressure from the more "radical" elements of the government (Louis Blanc, Flocon, and Ledru-Rollin primarily) which helped the workers' demand for a republic to be satisfied -- as deLuna emphasizes.[49]

However, these struggles of 'backroom politics' soon gave way to more ominous events.

The fact that a bourgeois government had been established [really only Louis Blanc and Albert could realistically be conceived as representatives of the working classes][50] and that the government represented interests which were antagonistic to the interests of the working classes, becomes more evident when we consider the overt military actions of that government. During March and April the government (which had no military forces at its disposal after the revolution) took steps to establish military units within Paris which it could count on (the Garde Mobile and the army -- which was brought in from the provinces, five regiments strong). This was all done, as deLuna notes, in the name of preservation of order.[51]

DeLuna documents how, on the political front, we can discern a "purge" of the leftist elements within the government. After the elections of late April

> . . . the moderate cast of the Assembly became apparent when in creating an Executive Commission to supplant the Provisional Government, it eliminated the socialist left. . . . Blanc and Albert were the only members of the Provisional Government who formed no part of the new one.[52]

Here the bourgeois nature of the February Revolution became fully evident.

> The first experiment in political democracy had produced an Assembly neither of proletarians nor of great _notables_, but rather of bourgeois and lesser provincial _notables_.[53]

The ballot box had apparently confirmed Marx's assertation:

> The first thing that the February republic had to do was, . . . to _complete the rule of the bourgeoisie_ . . .[54]

DeLuna and Robertson document how quickly Parisian society was increasingly becoming conscious of its own internal polarization. The workers' demand -- expressed through Blanc -- for "le droit au travail"[55] was soon ignored: Louis Blanc's vision of the National Workshops never fully got off the ground. ["As early as May 13 the executive commission decided to abolish the workshops."[56]]

By approaching the above events from the perspective of the dialectic, Marx recognizes the underlying cohesion of these often contradictory forces and confusing events. The July Monarchy fell; but why? After all, the aforementioned relative prosperity of France, the fact that the events of February seemed to catch everyone off guard, and the apparent impotency of the Chamber of Deputies at the most crucial moments presents us with a collage of circumstances which seem to reveal no obvious pattern in the context of the social upheavals of February and July, 1848.

Marx, in seeking an answer, looked beyond the blatant empirical manifestations of discontent (i.e. political agitation, editorial outrages against scandals, etc.) and recognized that such antipathies find resolution within the dialectical medium of the mode of production. Factionalism within the 'Party of Order,' the squabbles between the industrialists and financiers, the shifting loyalties within the army elite -- all begin to make sense when we appreciate the diverse, and very real (i.e. 'material') economic self-interests of these factions. Similarily, class antagonisms begin to sharpen as economic necessity (in the form of a depression) coupled with the closing of a perceived source of refuge from the effects of that depression (the National Workshops[57]) literally forced the proletariat into a realization that its interests were not compatible with the interests of the petty bourgeoisie. Now the bourgeoisie had what it wanted and did not see the need for any further agitation. Quite the contrary. What was needed was peace, stability, order; commerce and industry cannot function without a stable environment. For this reason the insurrection of June, 1848, had to be stopped. For this reason (after June France did not fully reach social stability) the nation eventually turned to Louis Bonaparte.

> When trade was good, as it still was at the beginning of 1851, the commercial bourgeoisie raged against any parliamentary struggle, lest trade be put out of humour. When trade was bad, as it continually was from the end of February, 1851, the commercial bourgeoisie accused the parliamentary struggles of being the cause of stagnation and cried out for them to stop in order that trade might

> start again. . . . The status quo could be maintained in only two ways: prolongation of Bonaparte's authority or his constitutional retirement and the election of Cavaignac.[58]

Thus the dialectical processes of historical materialism find general expression within the mode of production.

> The development of the industrial proletariat is, in general, conditioned by the development of the industrial bourgeoisie.[59]

The specific material expressions of the dialectical process studied in Class Struggles show that

> The first thing that the February republic had to do was, . . . to complete the rule of the bourgeoisie by allowing, beside the finance aristocracy, all the propertied classes to enter the orbit of political power.[60]

The emergence of antipathies in their clear form ensued, and the attendant flurry of events finds cohesion in the very fact of these antipathies:

> In a word: the revolution made progress, forged ahead, not by its immediate tragicomic achievements, but on the contrary by the creation of a powerful, united counter-revolution, by the creation of an opponent in combat with whom, only, the party of overthrow ripened into a really revolutionary party.[61]

We now interject our outlining of mode III's historiographic criteria to put forth a vital qualification. The above five criteria are what may be termed 'formal' criteria. That is, the above are methodological guidelines which focus upon the necessary structural conditions of complying with mode III historiography. This structural aspect does not provide the necessary axiological conditions for adequate historiography. Left in purely formal form, the above lapses into the dilemma of mode I -- few valuational 'lessons' can be drawn from all this. As we have previously emphasized, the great strength of mode III is that it does indeed have a clear axiological component -- but arrives at it without the vagueries and idealisms inherent in mode II.

As chapter five emphasized, the axiological dimension permeates mode III, and this must find inclusion in any historiographic criteria of adequacy. Fortunately, we may very quickly list these criteria and bring this extended discussion to a speedy conclusion. The lengthy sorts of elaborations attending our first five criteria will not be necessary as virtually every line of Class Struggles exudes the following axiological criteria; therefore detailed illustration would be rather like describing a forest in terms of individual trees.

(vi) Historical Explanation and Understanding Include Both Description and Empathy With a Class Perspective

How historical description must be effected we have noted, but the existential meaning of the historical work and the historical subject is an equally vital component of mode III historiography. All of Class Struggles is written from the vantage point of the proletariat. This is 'understanding' of history not as an 'objective' flow of events, but understanding history through finding a meaning in the historical process. Indeed, all of the events Class Struggles depicts are the backdrop for the real, existential, human actors within these events. The lot of the peasants; the suffering of the proletariat; the frustrations of the bourgeoisie: these are the realities of the human condition which Class Struggles clearly illuminates.

'History,' after all, is only to be found in the epistemological and axiological level we, as men and women, occupy. That is why Class Struggles so unashamedly evokes emotive expressions and so clearly identifies antagonists and protagonists in the bitter struggles of men with men and men with their social environment that the years 1848 to 1850 witnessed.

No "dry-as-dust" history is possible in mode III because the mode of production is populated with creatures of consciousness and flesh -- not mode I's physical entities nor mode II's metaphysical forms. But this axiological dimension is not limited to the material text of the mode III historical work.

(vii) The Historian is Himself Part of the Historical Process

As we can identify 'progressive' and 'reactionary' modes of production, and classes, and individuals within those modes, so can we accordingly identify written histories and historians. Precisely because a mode of production is a wholly human realm, all activities of men have an effect upon that mode. We as individuals are not the atomic entities of mode I, nor the oxen tied to a cosmic wheel as mode II pictures us. How often has Marx emphasized the "activity" of men? How little does it take to realize that all human activity has a material effect in that each of us contribute to the relations constituting the mode of production? Like every other activity, the act of writing history is necessarily a social activity -- as is the act of reading any historical work. For the historian, the 'escape from history' is an impossibility. We may claim we only "interpret" the world; in fact we are constantly contributing toward "changing" it.

The historian cannot help but 'choose ideas' because, no matter what he/she does, he/she will be on a side. The world of men is the world of classes. As long as class struggles mark our modes of production, the historian and his/her historical work serve respectively as soldiers and ammunition within that struggle. But then that is as it should be, for is it not befitting a conscious creature to recognize that he/she has such control over his/her personal destiny?

If the forceful language of *Class Struggles* strikes us as 'unprofessional' because it is not 'detached' and 'impersonal,' if the unequivocal approvals and condemnations riddling *Class Struggles* strike us as 'bias,' if the clear statement of general laws in *Class Struggles* strikes us as 'arrogant,' then we may take cynical comfort in the fact that these presumptions are all open to refutation upon a fully material basis. *Class Struggles* not only takes a stand, it takes it 'out in the open,' so to speak. Furthermore, and more important, it clearly points to lines of investigation which will either affirm or refute its theses. This alone, in a discipline which is all too often characterized by ambiguous and ill-defined methodological paradigms, should be enough to recommend mode III historiography. Methodologically and existentially, historiographic criteria six and seven are fully defensible and essential, and fully correspondent to criteria one to five. This chapter five made clear, and in the interests of brevity the linkages need not be restated here.

A CRITERIA OF TESTABILITY: REFUTATION THROUGH THE MATERIAL BASE

The above seven tenets comprise at least the basic and necessary methodological criteria for mode III historiography. These seven criteria also illustrate the strength of mode III historiography in both positive and negative terms. Positively, we have seen the successes of mode III historiography concretely illustrated in the tumultuous events which Class Struggles coped with. Negatively, we recognize that mode III historiography reveals clearly its material basis, and that basis [precisely because it is material] is correspondingly open to refutation. It is to the question of refutation that we now turn.

Indeed, material questions have been asked which do challenge Class Struggles. We note, for the sake of illustration, but a few of the challenges which have been raised. We begin with the question of the nature of the Parisian "proletariat."

As Marx notes in Capital, it is a law that "accumulation of capital is . . . [accompanied by an] increase of the proletariat."[62] This is a consequence of the tendency of capital to centralize;

> . . . the development of the productiveness of social labour pre-supposes co-operation on a large scale; . . . [as] the means of production [are] economized by concentration on a vast scale; . . .[63]

What is to be stressed is that the proletariat is an industrial proletariat. As the Communist Manifesto asserts: "Modern industry has converted the little workshop of the patriarchal master into the great factory of the industrial capitalist."[64] It is precisely this increased centralization[65] which increases the size and strength of the proletariat,[66] and it is precisely the resulting polarization of society into "two great hostile camps"[67] which will bring about the revolution of the proletariat.

However, it is not fully evident that the Parisian 'proletariat' which manned the barricades was in reality an industrial proletariat. As deLuna observes, most of the workers were employed in small shops producing items for local (Parisian) sale,[68] and: (i) In the artisan sections of Paris there was no self-evident distinction between small employers and the workers they employed. (ii) Many fighters were prosperous workers who were materially affected by economic upheavals. (iii) Few fighters came from mechanized industry; instead most were drawn from traditional crafts. (iv) Most fighters were recent immigrants to Paris.[69]

Marx might counter that "the proletariat is recruited from all classes of the population,"[70] however the unequivocally stated preconditions for the creation of the "proletariat" (centralization of capital and industry, etc.) perhaps were not clearly[71] present in France. Indeed, one may speculate that the influx of workers into Paris -- some of the same workers who were to man the barricades -- was the result of Louis Philippe's plan to fortify Paris. Once the task was completed, great numbers of workers remained in Paris.[72] This is hardly the type of "proletariat" which would be drawn into the cities from the country by the demands of industry.[73] One could in fact argue that this more or less transient element of the population is more like the "lumpen-proletariat"[74] than the true industrial proletariat which has been forced into "absolute impoverishment"[75] by the dynamics of the capitalist mode of production. (There is doubt if Marx would concede that the lumpen-proletariat could ever make a positive contribution to historical evolution.)

A further problematic centers on the "progressive" reforms undertaken by the "bourgois" governments between February and June. The reforms range from the ideological and political -- i.e. the institution of universal manhood suffrage[76] -- to the more mundane (but in the end more crucial) economic reforms.[77] The question is: Just how 'repressive' and 'exploitive' was the government between February and June, 1848? In terms of Marx's general historical perspective, we know that he considers capitalism as a "progressive" force when compared to previous epochs.[78] However, in speaking of February and June (and the time in between) Marx seems to put the governments of that time in a purely negative light.

> In the National Assembly all France sat in judgment upon the Paris proletariat. The Assembly broke immediately with the social illusions of the February Revolution; it roundly proclaimed the bourgeois republic, nothing but the bourgeois republic. It at once excluded the representatives of the proletariat, Louis Blanc and Albert, from the Executive Commission appointed by it, it threw out the proposal of a special Labour Ministry, and received with acclamation the statement of the Minister Trelat: 'The question now is merely one of bringing labour back to its old conditions.'[79]

The above polemic -- notable for its blanket condemnation of the Assembly, without concern for any genuinely humanitarian reforms which may have been undertaken -- is not uncharacteristic of the whole of Marx's analysis as found in Class Struggles. Indeed, Marx often goes further in his condemnation. He accuses the government of consciously provoking the working classes into a battle so that it may destroy them.

> The Paris proletariat was forced into the June insurrection by the bourgeoisie. This sufficed to mark its doom. . . .
>
> . . .
>
> . . . Having constantly before its eyes the scarred, irreconcilable, invincible enemy -- invincible because his existence is the condition of its own life -- bourgeois rule, freed from all fetters, was bound to turn immediately into bourgeois terrorism.[80]

The charge that the government provoked the workers into battle (in June) makes sense only if the government was sure of victory. The opposite has been argued -- namely, the government was not sure of its ability to quell an armed insurrection. As deLuna notes,

> The thesis of provocation rests on the unhistorical assumption that the triumph of the government was inevitable, when in fact the issue was in doubt for some time, and in the end four days of difficult combat were necessary to defeat the insurgents.[81]

The issue is crucial because the dialectical course of history is in question. If the "completion" of the rule of the bourgeoisie is a necessary step in the process of history; and if the proletariat can realize self-consciousness only through its clash with the bourgeoisie;[82] then battle is inevitable. "[Whenever the bourgeoisie ascends to a position of power] it has . . . [instituted] naked, shameless, direct, brutal exploitation [of the working class]."[83] This assertion of Marx can be tempered in that: it ignores the reform legislation of the Assembly; it assumes that the bourgeoisie is so strong that it cannot other than win the initial battles with the proletariat; and it implies that the bourgeoisie consciously wishes to solidify its rule -- through force if necessary. We have seen that the first supposition (reform legislation) has been ignored by Marx; we have noted that the physical capability of the bourgeoisie to win the battle was in question; and it can be suggested that the last assertion (conscious exploitation by the bourgeoisie) is also questionable.

For Marx, the National Workshops hold a central importance for the understanding of the events of June.

> The proletariat . . . on the 15th of May, . . . pushed its way into the National Assembly, sought in vain to recapture its revolutionary influence and only delivered its energetic leaders to the jailers of the bourgeoisie. Il faut en finir! This situation must end! With this cry the National Assembly gave vent to its determination to force the proletariat into a decisive struggle. The Executive Commission issued a series of provocative decrees, such as that prohibiting congregations of people, etc. The workers were directly provoked, insulted and derided from the tribune of the Constituent Assembly. But the real point of the attack was, as we have seen the national ateliers. The Constituent Assembly imperiously pointed these out to the Executive Commission, which only waited to hear its own plan proclaimed the command of the National Assembly.
>
> The Executive Commission began by making admission to the national ateliers more difficult, by turning the day wage into a piece wage, by banishing

> workers not born in Paris to the Sologne, ostensibly for the construction of earthworks. These earthworks were only a rhetorical formula with which to embellish their exile, as the workers, returning disillusioned, announced to their comrades.[84]

Is the above in fact an accurate description of the situation? Did the National Assembly seek to 'provoke' the workers; or was the failure of the Workshops not the Assembly's fault? Robertson has suggested that the opening of the Workshops was responsible for such a great influx of unemployed into Paris that the Workshops could not possibly have met the demand for assistance.[85] This shifts the 'blame' for the failure of the programme from conscious 'provocation' to unavoidable failure.

Indeed, one may well wonder about the nature of the Parisian "revolutionary masses." It is worth stressing that the government members -- in spite of notable differences of opinion -- managed to work together. Even Louis Blanc supported the rule that 'order' was necessary to preserve.[86] That same "workers' representative" disassociated himself from the events of June -- even though he was in England and presumably free to spout any sympathies he might have cared to.[87] Had Blanc been 'co-opted'; or were there enough 'lumpen-proletariat' among the honest proletariat in the barricades to make the June insurrection mere mass violence rather than a 'struggle for liberation'?

The above are all important questions: ones which at least ask if the relations of class antagonisms have been properly formulated in Class Struggles; and even question the principles of qualitative transformations through social upheavals. Of course, the issues center around whether these are qualifications upon sufficient conditions, or whether these qualifications actually effect the necessary, general, material, tenets of mode III. It is not our intention to launch into that debate here, rather we wish to suggest that it is perhaps a fair criticism of mode III that the dialectic -- irrespective of the fact that it is material -- is possibly not sufficiently 'explicit,' so to speak, to fully facilitate a tightly controlled testing of its own validity. This brings us to another material question and another desirable criterion of testability.

A CRITERION OF TESTABILITY: THE SPECIFICITY OF THE DIALECTIC

Before we can decide whether the necessary conditions of the mode III perspective are being jeopardized by the sorts of material qualifications alluded to above, it is of course imperative that the dialectic be clear, and material, and therefore precisely testable as a result. That is why mode III must take very seriously the haunting criticism of Popper. That is why we keep returning to Popper's insistence that "the dialectician need never be afraid of any refutation by forthcoming experiences" because "any development whatsoever will fit the dialectic scheme."[88]

While we have argued that this criticism is indeed true in the context of dialectical idealism à la mode II, we have also argued that it is not true in the context of mode III dialectics.

That is because the mode III dialectic is a material dialectic, and therefore open to material investigation.

It is toward the end of allowing material verification that Marx so painstakingly outlined the 'general' relations of production. These he cast in fully material form: material because they fully correspond to the actual, material, specific relations of production which existent modes of production exhibit. Since the general relations in the specific context exhibit their own contextual peculiarity, the necessary and the sufficient -- i.e. general and content specific -- cannot be treated as ontologically identical, although the specific always exhibit and embody the general. The question now is: are the general, necessary, conditions sufficiently precisely outlined to be fully testable? It can be argued that this goal is not being met.

Marx, it must be stressed, fully recognized the need to avoid ambiguity in his dialectics -- otherwise there would be little difference between his dialectics and the dialectics of mode II. Marx's resolution to the problem relied heavily upon the notion of "correspondence": that is, all relations in the mode of production as a general construct must correspond to actual, real, relations in social reality -- i.e. mode of production as a specific construct. Thus social reality provided a firm, material, reference base for the general relations of the mode of production as a general construct. Because social reality is fully material, and because the general relations of the mode of production as a general construct fully corresponded to this fully material social reality, the mode of production as a general construct is therefore fully material.

That is why mode III is a fully "scientific" mode -- as Marx so often emphasized -- and he always took great care to be most explicit about the unqualifiedly material base of the mode of production as a general category. Mode III always started study from the basis of "real, active men" and built only upon the "basis of their real life." Only this way can "mystification and speculation" be avoided: "The fact is, . . . that definite individuals who are productively active in a definite way enter into . . . definite social and political relations. Empirical observation must in each separate instance bring out empirically, and without any mystification and speculation, the connection of the social and political structure with production."[89] This correspondence within modes of production is thus fully material, and has a further correspondence with production 'in general' which is also fully material.

> Whenever we speak of production, then, what is meant is always production at a definite stage of social development -- production by social individuals. . . . However, all epochs of production have certain common traits, common characteristics. Production in general is an abstraction, but a rational abstraction in so far as it really brings out and fixes the common element and thus saves us repetition.[90]

Such "correspondence" is the basis of mode III's scientific dialectical materialism. However, 'scientific' and 'material' does not translate into 'positivistic' and 'empirical.' This cannot be overemphasized. To rely upon an equation of empiricism with scientism is to lapse back into mode I and to lose -- at the very least -- the dialectical dimension. The empirical does, as Marx states, "bring out" relations, but it is not actually these relations. The relations are dialectical; empiricism cannot incorporate the dialectic; therefore the broader -- but more accurate -- concept of materialism is the foundation of a "scientific" dialectical mode of inquiry.

This is fine and good: but, is there not a way to make even more explicit the precise nature of the material, general, dialectical relations to make easier an implementation of our above criteria of testability -- i.e. 'refutation through the material base'? The degree to which the general material relations are specific is, after all, the degree to which it becomes more and more difficult to excuse 'apparently' contradictory [as previously outlined] data as but mere 'sufficient' [i.e. specific to a particular mode and time and place, etc.] conditions and thereby [through a formal rationalization which is suspiciously like the 'sophism' Marx fought against] deflect any truly critical analysis of the ultimate base of the mode III world view -- i.e. analysis of the necessary conditions comprising the mode of production as a general material category.

To avoid such charges and to strengthen the criteria of testability, it is suggested that a fourth general principle for dialectics be recognized. Accepting what are generally recognized to be the major principles of dialectics -- the principle of contradiction; the principle of the unity and inter-penetration of opposites; the principle of transformation of both qualitative categories and quantity into quality[91] -- we propose a corollary principle which is at base a sort of partial reconciliation of the material and empirical and will provide for the greater specificity and therefore the more precise testability of mode III's dialectical method: the principle of 'critical mass.'

By way of leading to this, let us look at some examples in the physical sciences -- the sort which lead Popper to discount both dialectics and "wholistic" perspectives (into which he would include mode III) as vague verbal sophistry. [Popper does, however, admit a very limited sense in which the term 'whole' can have 'scientific' -- in the positivist sense -- significance: when it denotes "certain special properties or aspects of the thing in question, namely those that make it appear an organized structure rather than a 'mere heap.' (i.e.) . . . regularities of structure (for example symmetry) which can be found in certain things such as organisms, or electrical fields, or machines."[92]]

> A critical remark may be added on wholes in sense (b) [i.e. Popper's above cited qualification], which I have admitted to scientific status. Without retracting anything I have said, I must point out that the triviality as well as the vagueness of the statement that the whole is more than the sum of its parts seems to be seldom realized. Even three apples on a plate are more than 'a mere sum,' in so far as there must be certain relations between them (the biggest may or may not lie between the others, etc.): relations which do not follow from the fact that there are three apples, and which can be studied scientifically. Also, the much advertised opposition between the 'atomistic' and the 'Gestalt' approach is entirely baseless, at least as far as atomic physics is concerned: for atomic physics does not merely 'sum up' its elementary particles, but

> studies particle systems from a point of view most definitely concerned with wholes in sense (b).
>
> What most of the Gestalt theorists apparently wish to assert is the existence of two kinds of things, 'heaps,' in which we cannot discern any order, and 'wholes,' in which an order or symmetry or a regularity or a system or a structural plan may be found. Thus, a sentence such as 'Organisms are wholes' reduces itself to the triviality that, in an organism, we can discern some order. Besides, a so-called 'heap,' as a rule, has a Gestalt aspect too, just as much as the often cited example of the electrical field. (Consider the regular manner in which pressure increases within a heap of stones.) Thus the distinction is not only trivial, but exceedingly vague; and is not applicable to different kinds of things, but merely to different aspects of the same things.[93]

The above examples are instructive in that, apparently, relations are studied 'empirically' in the sense of mode I and, more importantly, it appears that in the case of Popper's "heap of stones" we even have the inclusion of qualitative change. The 'moment' and the 'forces' -- i.e. 'relations' -- at which metamorphic changes occur are, after all, calculable quite precisely and can in consequence be stated quite precisely. But the level of reality the above examples deal with are all taken from our first level of ontological transformation and epistemological significance: is there a possibility of corresponding precision in the third level?

The question is significant because the 'general' principles of empirical science must be recognized as just that -- general. As we have stated, we do not live in a frictionless world and all scientists know that any scientific 'law' is not fully an empirically precise statement because there are always circumstances which affect the empirical reality and processes -- such as entropy -- which qualify the empirical result. Nevertheless, empirical laws do outline the absolute limits of variation which the specific context may affect, and thus the correlation between necessary and sufficient conditions -- or the general and the specific -- is quite precise. This greatly facilitates the testing of the general laws.

Thus, if mode III is to reply to any accusations of vagueness, it must do so by first outlining the absolute limits of the general relations of the mode of production. Granting that these are material, mode III must nevertheless seek an empirical correspondence which will state at what point material relations must result in qualitative changes. It is for this reason we used the term 'critical mass': this will give the principles of material dialectics the opportunity to formulate more specific boundaries and help uncover at what point empirical phenomenon in the form of appropriation of wages, concentration of capital, etc. will push the material relations of the specific mode of production to generate antipathies which must result in dialectical upheavals. To restate, in terms of our aforementioned general principles of dialectics we ask: recognizing that the dynamic 'whole' -- i.e. the principle of the unity and inter-penetration of opposites -- undergoes constant tensions -- because of inherent contradictions -- what are the absolute limits (which the empirical manifestations give evidence of) at which the transformation of qualitative categories must occur.

This is not to propose a radical innovation; it is merely to further clarify the correspondence principle. The obvious implications of this are that development of general categories with specific context will again proceed hand in hand, and that the focus of study will concentrate upon smaller units but without any loss of a macro-perspective. Indeed, Class Struggles shows such virtue because, as Engels' "Introduction" acknowledges, Class Struggles is an application of what is without question a "broad outline of the whole of modern history" to a much more specific context.[94]

What, we feel, is often not fully appreciated is the sheer amount of simple detail that Marx put into his own work, and the laborious precision he sought in his own writings. He could and did work simultaneously in "broad outlines" and what we would today term 'micro-studies'; and he saw no conflict between the two. Quite the contrary: he was always seeking correspondence between the two and testing the former through the material context of the latter through the tool of empirical methods. Thus the 'material' is not the 'empirical' -- but the former embodies the latter and the latter has a rightful place in the important task of being one major method of documenting with precision the material base of mode III.

Establishing further correspondence between the empirical and the material will throw much light upon the precise nature of dialectical social relations, and attempts to establish the absolute limits at which such relations must yield qualitative transformation will help clarify the general conditions.

We, of course, are not under the illusion that we have solved any such problem, but we believe we are at least pointing toward real problems in mode III which warrant serious attention. However (and here we are in no manner attempting to denigrate the importance of the above) it must be recognized that the 'criteria of testability' which we labelled 'refutation through the material base' and 'specificity of the dialectic' are, respectively, what may be called 'investigative' and 'methodological' problems. In the former, it is a matter of conflicting data and this leads to the latter in the form of the question: does such data in fact throw into question the concept of mode of production 'in general,' or is that data explainable in terms of a particular context which actually corresponds to the general conditions? Important as these issues may be, we are still left with the realization that data can be resolved and principles can be saved even if it ultimately means that new general (but nevertheless compatible) principles must be formulated.

In other words, the above are not problems which necessarily threaten the survival of mode III, although they may force an adaptation or reformulation of that mode. Thus they are 'second order' concerns to any issues which attack the very structure of that mode. It is to such a structural problem that we now turn.

MODE III AS A 'STRUCTURAL TAUTOLOGY' OR 'CLOSED SYSTEM'

The Basis of the Systems Approach

We believe it can be argued that mode III is fundamentally compatible with what has emerged today as a powerful and encompassing weltanschauung: 'systems philosophy' or the 'systems approach.'* We are not the first to draw attention to the affinity of the Marxian orientation and the systems approach, and elements of the latter are found in other viewpoints. Richard Mattessich observes that

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* We distinguish between the 'systems approach' or 'systems philosophy' as a general category, and specific forms of the systems orientation. The most concrete forms of application of the systems approach are the cybernetic models employed by information, organizational, management, etc. theory, as well as, of course, models used in the study of physical processes in the natural sciences. In the form of 'functionalism' the systems approach finds a broader -- sociological -- scope, and in the guise of General Systems Theory is elevated to an attempt to unify all science under one conceptual and methodological umbrella. General Systems Theory is a precise articulation, and because of that very precision it is but one form of the 'systems approach' in general. As W.R. Ashby notes, General Systems Theory was "developed in the hands of von Bertalanffy and his co-workers, [and] takes the world as we find it, examines the various systems that occur in it -- zoological, physiological, and so on -- and then draws up statements about the regularities that have been observed to hold. This method is essentially empirical."[95] It is further, as Richard Mattessich notes, an attempt "at a unification and peculiar reconstruction of most, if not all, sciences."[96] Our concern, like T. Downing Bowler's, is to present General Systems Theory "as a series of universal generalizations."[97] Thus, in Laszlo's words, "The general systems theory, pioneered by von Bertalanffy, Kenneth Boulding, Anatol Rapoport and their collaborators, gives us a theoretical instrument for assuring the mutual relevance of scientific information and philosophic meaning. Extended into a general systems philosophy, this instrument can polarize the contemporary theoretical scene as a magnet polarizes a field of charged particles: by ordering the formerly random segments into a meaningful pattern."[98]

> The systems approach seems to be . . . a special methodology rather than a new science or super-science. In particular it is a methodology which grows out of a holistic view, and this is not bound to a single discipline or a limited number of them. The holistic world view is no novelty but requires the acceptance of certain basic assumptions. It can be encountered in the philosophies of Giambattista Vico (1668-1744), G.W.F. Hegel (1770-1831), A.N. Whitehead (1861-1947) and many other philosophers (perhaps going back as far as Heraclitus and Lao Tse), and is necessarily accompanied by a strong emphasis on history; . . .[99]

More specifically, Alan R. Thomas and Martin Lockett in a recent, insightful, paper explicitly delineate the compatibility of what we termed mode III and the systems approach,[100] and these authors note a recent endeavour of P. Oquist who "sees some interpretations of Marxist method to be generally consistent with ideas of action-research [one special case of the systems approach]; . . ."[101]

If mode III can be shown to be a special case of what we now term the systems approach, then we can expect it to exhibit the methodological strengths and weaknesses of that orientation. To begin, the strengths of the systems approach are formidable -- and compatible with the strengths of mode III. These strengths we may appreciate through, first, examination of some of the most basic premises of the systems approach.

A most fruitful and insightful avenue to understanding systems theory is developed by Richard Mattessich. He addresses what he terms the "five ontological assumptions of systems methodology," and his introduction to these assumptions is worth citing in full:

> . . . it is possible to postulate the following five ontological hypotheses, which might be regarded as the most basic principles of systems methodology. As with most postulate statements, they sound either obscure or trivial or both. Besides, their high degree of generality does not promise any immediate practical application or usefulness. Nevertheless, a systems approach without them resembles a plant without roots, and their explicit formulation seems to complement rather than duplicate past efforts in systems research. Their dual nature tempts us to a double formulation, in such a way that the ontological hypotheses are listed . . . [with] the corresponding systems principles . . .[102]

The first principle systems theory recognizes is the "polarity principle"; a principle whose "apparent triteness vanishes as soon as it jolts us out of the conventional belief that we can analyze an entity without heed to its counter-entity, and as soon as it dawns upon us that polarity and tension are the most fundamental notions underlying the phenomenon of Being."[103] The ontological hypothesis is: "Being (i.e. any kind of existing entity) presupposes another 'being' of opposite polarity. This results in a tension, the release of which tends to annihilate (fully or partly) one or both of these entities, or to create a new one with its own opposite."[104]

Here the dialectic is strikingly evident, and inherent tension is recognized to be an integral dimension of existence. The corresponding systems principle recognizes the co-existence of systems in precarious balance -- always in danger of qualitative transformations when the dialectical tension reaches a critical stage: "To any system belongs a counter-system . . . A removal of the boundary between these systems tends to dissolve one or both of them and possibly creates a new or changed system with its own counter-system."[105]

The centrality of process is a consequence of the recognition of reality as a state of dialectical tensions, which are resolved within states of tenuous stability. Thus the principle of polarity yields the principle of "periodicity": "polarity, which apparently can be sustained only by a constantly recurring change"[106] results in the recognition of the inevitability of "periodic" changes; "Becoming, the dynamic aspect of Being, presupposes (cyclical, helical or similar) periodic changes."[107] Through this ontological hypothesis change and stability are incorporated as but antithetical dialectical moments, yielding the systems principle of "periodicity": any system is subject to change, obeying some kind of periodicity . . ."[108]

However, periodicity does not imply relativism; 'totality' recognizes the holistic nature of system inter-relation. Our third ontological hypothesis recognizes that "Beside the general process of increasing disorder . . . there exist localized processes which integrate individual . . . entities into an entity of higher order with properties of its own."[109] Mattessich labels the corresponding principle "concrescence (or assemblage, or co-ordination, or organization)."[110] This principle states that "there exist processes of organization, affecting (component) systems in such a way that the emerging super-system reveals an order and some properties not manifested by any of its components."[111]

In speaking of holism and the holistic principle, it is to be emphasized that these are not 'random' wholes or (as Popper phrased earlier) "mere heaps":

> The principle of formative preference is intricately interwoven with the holistic outlook of the systems approach. Preferences, norms and value judgements can perhaps be neglected as long as one deals with a collection of descriptive sentences (e.g. science in the positivistic sense). But the moment the system boundaries are broadened to include the dynamic aspects of creating these sentences, preferences inevitably enter the picture. Of course, seen from a general point of view, these preferences need not express those of human beings.[112]

Thus our fourth ontological hypothesis states that "every existing entity is (or can be interpreted as) the result of a selection process within this or some other entity, manifesting a norm or preference."[113] Correspondingly, we derive the principle that "the formation of a system implies a selection among alternatives which, by necessity, is bound to some norm or preference wherever it may reside."[114]

This 'selective' dimension -- the dimension that is so closely related to order and holism -- can be formulated in our final ontological hypothesis: "Entities possess qualities and tendencies which can be interpreted as due to norms and similar sources of information. Such information may be permanently incorporated in the entity or temporarily imposed from outside."[115] Correspondingly, we derive our fifth and final principle: "The norms incorporated in a system become a fixed source of information for this system, whereas the norms temporarily imposed upon the system by the environment, constitute a variable information source for this system. Such informations determine the characteristics and behavior of the system."[116]

In outlining the above ontological hypotheses and corresponding principles, we have of course outlined an extremely comprehensive perspective -- a cosmology which includes both man and matter. The striking similarity between mode III and systems philosophy is readily perceived: correspondence between different ontological levels; recognition of such correspondence without lapsing into reductionism; the emphasis upon change; the recognition that qualitative categories can undergo qualitative transformations; the dialectic; tension and the unity of opposites; holism; order; directionality; 'meaning' -- in the sense of conscious norms at the human level and instinctual, evolutionary or purely inanimate physical ordering processes at other levels of nature.

Thomas and Lockett make more explicit the general affinities of mode III and the systems approach. They list several "similarities between systems and Marxism . . . (i) holism (ii) meta-disciplinary perspective (iii) multi-causality (iv) emphasis on change."[117] As their succinctness cannot be improved upon, we cite at length:

> (i) Holism. Both Marxists and systems methodologists stress holistic rather than reductionist principles. Systems theory attempts a holistic analysis almost by definition. . . . Marxism also offers a holistic perspective. In part, this arises from the generally higher level of analysis typically used in Marxism. But this is not all: for example Engels (1975) states in general terms 'The world

clearly constitutes a single system, i.e. a coherent whole,' whilst Marx argued that '. . . production, distribution, exchange and consumption . . . are all elements of a totality, distinctions within a unity. Production predominates . . . but there is interaction between the various elements. This is the case in every organic whole . . .' (quoted in Bottomore and Rubel, 1963) Also, like many systems theorists, Marx made use of organic analogies to stress the importance of holism, for example his argument in Capital that '. . . the present society is no solid crystal, but an organization capable of change, and constantly changing.' (in Feuer, 1969)

(ii) Meta-disciplinary perspective. Both Marxism and systems theory are not confined to a particular discipline. Checkland's (1979a) description of 'systems' as 'a meta-discipline, one which can talk about the subject matter of any other discipline' is echoed in Marxist analyses of other disciplines. In particular both systems and Marxism can be used (a) as a distinctive perspective within existing disciplines, and (b) as an overall framework for investigation. So, for example, Gaines (1977, quoted in Lafreniere et al., 1979) at a major international conference on 'applied general systems research' argued that: 'General Systems Theory is essentially a dialectical method rather than a discipline and it is characterised by the freedom it enjoys to assimilate change at any level.'

(iii) Multi-causality. The cause-and-effect model of classical scientific method is recognized as inappropriate in many cases by both Marxism and systems. Engels (1975) argued that: '. . . cause and effect are conceptions which hold good only in their application to individual cases. In their general connection with the universe as a whole they run into each other, and they become confounded when we contemplate that universal action and reaction in which causes and effects are eternally changing places, so that what is effect here and now will be cause there and then, and vice-versa.'

For systems methodologists, ideas of multi-causality are also important and multi-causality may even rank with holism as one of the defining concepts of systems thinking.

> (iv) Emphasis on change. Linked with their rejection of positivist scientific method, both systems methodologists and Marxists emphasise change -- both as a relatively universal phenomenon and as the object of analysis and action. For Marxists, the study of society leads one to see the possibilities of change which action, particularly by social classes, can bring about. Within capitalist societies and in a transition to socialism, they specifically emphasise the role of the working class in transforming society and social relations.
>
> Similarly systems methodologies are concerned with change -- though, as we have noted above, often at the organisational level.[118]

And, finally, Thomas and Lockett note a fifth similarity: mode III's emphasis upon human action and social practice as an integral part of theory is also compatible with the systems approach. The "integration of 'theory' and 'practice'" in the "process of generation and validation of knowledge" is a concern of both Marxism and 'systems action-research' which is "defined by R.N. Rapoport (1970) as aiming to '. . . contribute both to the practical concerns of people in an immediate problematic situation and to the goals of social science by joint collaboration within a mutually acceptable ethical framework.'"[119] The similarity of mode III and the systems approach is thus again evidenced in that "both the Marxist and the soft systems methods seek to analyse specific situations and rely on practical action and its results simultaneously for the generation of knowledge and its validation."[120]

The above provide a broad framework which clearly suggests that there is a great structural similarity between the systems approach and mode III.[121] However: does it follow that mode III, because it shares such structural similarities, also falls prey to the limitations of the systems approach? Such limitations have been well documented and criticisms revolve around basically one central structural feature of the systems approach which, if mode III shares it, would greatly diminish mode III's claim to being a synthesis that truly breaks the methodological bonds of the first two modes.

We herein refer to the fact that the systems approach, in spite of all the above talk about 'change,' contains such changes which firmly delineated bounds. This is because the systems approach holds what may be termed the law of 'conservation' above all others. That is: a 'system' is seen to be a 'dynamic' entity because it is but one 'particular' manifestation of many possible combinations of the dialectical tensions which constitute its being. Because the particular stable form the system is assuming is a rather delicate and consequently tenuous 'balance' of such 'forces,' disequilibrium can occur and a new balance will emerge which will in fact result in a new system with unique characteristics. Nevertheless, the new system is really a redistribution of the forces constituting the old system, and the 'sum total' of such forces is equivalent in both systems. As Gerald Weinberg notes, the "total energy in a system is constant."[122] This is most obvious in physical systems, but the very 'universality' of the systems approach has resulted in the application of the same principle of conservation to social systems. As Arthur Brittan emphasizes: "In both psychological and sociological theory, the systems concept is tied up to concepts relating to equilibrium and homeostasis, thus indicating its association with mechanical and organic models."[123]

The above does not imply that we must think of all the energy in the universe and all the dialectical tensions and all the existent 'balances' of such energies and tensions as one undifferentiated system [although the systems approach is 'univeralistic' and one can view literally the whole universe as 'one system']. There are obvious qualitative differentiations within reality, and thus we recognize the principle of 'structuralism.' Structuralism, however, also implies the notion of correspondence:

> . . . modern systems theory makes the same sort of statements about the isomorphy between levels as does structuralism, but in conceiving of systems as being the units of analysis special attention is given to the key concept 'organization.'[124]

Inorganic, biological and social reality are three convenient, and obvious, structural divisions which, in spite of 'isomorphy,' cannot be cavalierly reduced to each other. Nevertheless, there is 'correspondence' between these levels. Further, within each structural level, there are a variety of possible dialectical resolutions of the forces and tensions [i.e. the 'energy' of the system(s)]. To most readily conceive how such resolutions manifest themselves we may rely upon the following definitional approach, articulated by Richard Jung.

We may conceive of a 'dialectical' system as a 'set' consisting of two subsets: the subsets and the relations of these subsets. This satisfies dialectical criteria of including 'entities' (the 'subsets' -- which can be themselves composed of entities existing in relation to other entities) and 'forces' (the relations between the sets which may be conceived as relations of tension). The above general definition of a system begins to yield order when we conceive of what the field of the system is: that is, we effect a union of all elements in the subsets (which, of course, can be viewed as the creation of a new set). When we partition the field along various co-ordinates (we must have a minimum of two co-ordinates) we delineate the space of the field. The space of the field defines all the possible states of the field. To make a particular selection from the field is to isolate the state of the system. The state is a particular selection from the field, it is some particular combination of elements. If we make known all the permissible [because of the tension of forces, obviously not all theoretically 'possible' states are in reality 'permissible'] states of the system, we have given the structure of the system. Of course, because the system is dynamic, it has several possible states. Thus we recognize that the system has a process: process traces the 'transition' of the system -- not only in time, but also in direction -- and documents what may be called a 'string' of states. Process is a transition of states within the system. Finally, we must be aware that the system may develop. Unlike process -- which saw transition of the system within permissible states of the system [i.e. within the structure of the system] -- development sees the entire structure of the system change. Such an occurrence is 'possible' because it is still within the 'field' of the system; but it is 'impermissible' because it falls outside the structure of the system. We can see how the 'transition' of the system through 'process' may involve fairly so to speak 'traumatic' changes; but by comparison a 'development' of any system involves a truly fundamental, even 'catastrophic,' evolution of the very system.[125]

Methodological Limitations of the Systems Approach

The above theoretical discussion quickly yields a concrete methodological point when we realize that to know the 'history' of a system is to know the 'process' through which the 'structure' of the system has 'progressed.' However, to predict the 'development' of the system is to offer an at best hazardous guess because the tricky question of 'why is one development more likely than another?' arises: after all, anything outside the 'permissible' states of the system is just that -- not permissible -- so how can we 'know' where such a new development of the system will occur until after it occurs. [i.e. This will now become part of the 'process' of the system.] This point is absolutely crucial.

The above allows us to fully appreciate Thomas and Lockett's insight that the "implicit values in [systems methods] application are likely to be managerialist, technocratic and reformist."[126] A systems approach is necessarily so because systems analysis concerns itself with only the structure of the system and the process therein. If the system is 'society,' then any speculations on the 'development' of the system are just that -- speculations unfounded by any empirical support because they deal with concerns which are by definition outside the structure of the system. Because there is an almost infinite number of theoretically possible states outside the actual structure of the system [of, in this case, 'society'] -- but theoretically possible states which are still within the field of the system -- we are hard pressed to give evidence that anything within that range of impermissible states is more likely than anything else.

Of course, again, if a development occurs the new state automatically becomes part of the structure of the system, and thus a part of the process of the system. But this is post facto, and development cannot be predicted from process if one wishes to remain 'scientific' in the sense of either mode I or mode III. [We recall Marx's stress upon the fact that 'reality' must 'prove' theory: and 'reality -- in the form of actual historical process (i.e. the process of the system) -- cannot yield certain knowledge of a possible, future, development of the system as any development will see the system assume what is by material definition an 'impermissible' state].

Marxism as a Variety of Systems Method

If this is granted, it is obvious why any application of the systems approach must be "manageralist, technocratic and reformist": all one can do is 'tinker,' so to speak, with the system within its permissible states (i.e. its 'structure'). There is no 'science' of structural change -- i.e. of 'development.' Thus we see that in spite of all the rhetoric about 'change,' 'dynamism,' etc., systems theory is in reality a 'conservative' approach. And here, because we have linked the systems approach with mode III, we have surely antagonized almost the whole of the 'Marxist' movement. Are we insinuating that Marxism is not 'radical,' 'revolutionary,' etc. and not predictive of a society [i.e. a 'state' of the social 'system' of humanity] which is anything short of a form of social existence wholly and qualitatively different from previous forms [states] of social existence [i.e. a 'development' of the system rather than a part -- 'process' -- of the structure]?

We are forced -- hesitantly and with some reservations -- to answer in the affirmative. Because Marx was 'trapped,' so to speak, by notions of 'scientism' [in the mode III sense of the term], he elaborated a world view [projected a state of human society] which falls within the structure of the system [is a modification of 'permissible states' of the system]. We draw this conclusion in consideration of the following.

(i) The Labour Theory of Value

We may begin by examining the line of reasoning undertaken by Michael Barratt Brown[127] (who independently has arrived at some conclusions similar to ours). Brown notes -- and we have earlier emphasized -- that between the 'levels' of social reality [i.e. productive forces, productive relations, and social consciousness] there is "correspondence." Such correspondence does not necessitate, however, that there be a unilateral and total 'determining' of social existence and consciousness by the means and relations of production. "It is only the general character that is determined and the whole mode of production is the determinant."[128] Importantly, the underlying means of production embody very precise relations. Brown emphasizes Marx's assertion that

> The distinction should always be made between the material transformation of the economic conditions of production which can be determined with the precision of natural science, and the legal, political, religious, and aesthetic or philosophic -- in short ideological -- form in which men become conscious of this conflict [of the forces and relations of production] and fight it out. . . .[129]

Thus it is reasonable to conclude, along with Brown, that "It is by their understanding of these new forces and by their control over them that a new class of men become historically agents of social change."[130] However, it is equally reasonable to further agree with Brown that

> Marx was, however, not prepared to leave his predictions of the future course of social change to such tenuous connections. Within his general theory and at the heart of it there is the economic structure whose transformation 'can be determined with the precision of natural science.' When Marx came to write the Preface to Capital he says that 'it is the ultimate aim of his work, to lay bare the economic law of motion of modern society -- it can neither clear by bold leaps, nor remove by legal enactments, the obstacles offered by the successive phases of its normal development. But it can shorten and lessen the birth-pangs.' These laws then are something independent of the will of individuals. 'My standpoint is one,' says Marx, 'from which the evolution of the economic formation of society is viewed as a process of natural history.'[131]

Thus we can perceive that at the heart of the mode III perspective is what is clearly recognizable as a "self-regulating system":

> The economic laws that Marx enunciated in Capital, 'The Law of Value,' 'The Law of Property,' 'The Law of Capitalist Accumulation,' 'The Law of Increasing Misery,' 'The Law of Declining Rate of Profit,' 'The Law of Wages' -- all these are manmade and not 'laws of nature,' but they are not consciously manmade. When production comes to be socialized, when 'the extraneous objective forces that have hitherto governed history pass under the control of man himself, only from that time will man himself, with full consciousness, make his own history.' In the meantime Marx is describing a self-regulating system and 'it is a question of these laws themselves, of these tendencies, working with iron necessity towards inevitable results.' Between the different levels of interconnected structures in Marx's schema of society, then, the necessary conditions are not deterministic. Inside the economic structure the laws are much more mechanically applied.[132]

The key to this 'self-regulating' so to speak 'core' of mode III is the labour theory of value. We fully agree with Brown that this theory rests squarely upon the principles of 'conservation' and 'reciprocity':

> The whole working of Marx's model is contained within one law -- the law of value -- which is reminiscent of the law of the conservation of motion in the Newtonian system. There are in effect no leaks. Now, whereas Marx's 'law of wages' and 'law of capitalist accumulation' are quite specific to Marx's model, arising as they do from his socio-economic analysis, the law of value can readily be rewritten in terms of equilibrium analysis. In a market economy without any major element of state planning, the law of value is the equilibrating tendency of the forces at work at certain levels of prices (or exchange ratios of commodities), at certain levels of activity (or quantities of goods produced) and with a certain mixture of resources.[133]

Because the labour theory of value defines 'value' as a fixed quantity -- i.e. that which is produced by men, and this is, importantly, quantifiable -- all that any means of production can do is re-distribute this fixed amount of the 'total value' available to society through the productive ('labouring') activities of its members. Like energy, value is neither created nor destroyed; it merely assumes different forms -- i.e. the 'states' of the system are different modes of production which constitute the structure of the system. The illustration of the systems thinking involved in Marx's labour theory of value is found in three forms within the mode of production: the individual, capital and machinery.

The individual, as we have emphasized earlier, 'produces'; production is a 'creative' act; and that which is created is 'value.' If left to his own resources, each individual of course 'appropriates' all of the value so created. The act of production is, furthermore, itself an act of 'consumption': "The individual who develops his faculties in production is also expending them, consuming them in the act of production, just as procreation is a consumption of vital powers."[134]

But, of course, it is the form of capital that value now predominantly assumes. The 'value' of capital is precisely the 'value' of the labour that it embodies. The most successful method of appropriating individual labour value -- i.e. transforming it into capital -- is through the use of machinery.

Thus machinery is a significant component of the capitalist mode of production, but machines cannot create value; machines, as Marx conceptualizes them, can really only appropriate the value that individual labourers would have produced.[135] Thus:

> Fixed capital, considered as a means of production, whose most adequate form is machinery, only produces value (i.e. increases the value of the product) in two cases: (1) in so far as it has value, i.e. in so far as it is itself the product of labour, a definite quantity of labour in an objectified form; (2) in so far as it increases the proportion of surplus labour to necessary labour by making it possible for labour, by increasing its productivity, to create more quickly a larger amount of the products needed for the sustenance of living labour power.[136]

(ii) Correspondence

The labour theory of value is, of course, at the very core of mode III; but it is not the only central component of the Marxist perspective which is clearly compatible with the systems perspective. The notion of 'correspondence' is every bit as central to mode III as to the systems approach.

It seems clear that the law of conservation of energy is, to use a borrowed phrase, the 'root metaphor' for Marx's view that there is 'correspondence' (but not full 'identity') between ontological levels. At base, Marx's notion of correspondence is a positivistic one and probably is a result of the fact that he, in trying to shed mode III of all vestages of idealism, always sought to 'ground' the dynamics of social reality by finding rough correlations in natural phenomena (our first ontological level). This is also precisely what the systems approach does. As Bowler summarizes:

> Generalizations which can reveal the unity of all reliable knowledge must be derived from the careful investigation of the specialized bodies of knowledge. The purpose of such an investigation is to identify those isomorphic characteristics about which operational and reliable generalizations can be made. To the extent that one can identify generalizations which are universally applicable, one begins to define the conditions of existence and the essential nature of the universe as revealed by the contemporary state of knowledge.[137]

For Marx, the "generalizations which can reveal the unity of all reliable knowledge" can be found in the fact that all levels of reality seem to undergo qualitative flux and exhibit dialectical relations of tension. We have noted in chapter five how much stock both Marx and Engels put in the law of conservation of energy and the phenomenon of chemical transformations. Here, 'nature' seemed to be -- in very rudimentary form -- exhibiting the same sorts of flux that social reality evidences. 'Dialectical materialism' assumes many forms -- transformations which vary from ontological level to ontological level -- but the 'correspondence' of 'principle,' 'being' and 'change' in each level and between levels is clear.

However, because the analogy is one which itself is based upon a 'closed' systems model, the structural limitations of that model permeate all levels. In the end, the "self-regulating system" which Brown earlier drew our attention to shows itself to be rigid at all ontological levels and consequently 'creativity,' 'spontaneity' and 'consciousness' in the form of a 'constructionist perspective' (as a friend and advisor has pointed out) begin to be pushed into the background. As rigidity sets in, mechanism begins to assume methodological dominance.

This is (as a friend and advisor has again pointed out) a "perennial problem" with Marx -- he fluctuates, trying to make his perspective wholly 'scientific' (i.e. based on material, verifiable, principles) while struggling to break the methodological shackles of positivism. In relying upon the principle of correspondence, and thus 'tying' in social reality with physical phenomena, the positivistic influence is clear and an uncomfortable amount of 'mechanism' is the result. To put it a slightly different way, perhaps Marx became a victim of his own metaphor. As Arthur Brittan [and here he is referring only to systems theory] eloquently puts it:

> The assumption of concept neutrality is a false one. . . . language tends to achieve an autonomy of its own. . . . There is nothing intrinsically wrong in borrowing concepts . . . provided one realizes that the translation from one frame of reference to another is only of value when the translation is recognized for its heuristic value rather than for its isomorphic correspondences. To use the organic metaphor is one thing, to construe society as an organism is another.[138]

The prominence of 'metaphors' in mode III -- physical, thermodynamic, chemical, organic -- we have emphasized in chapter five. The single clearest illustration of the significance of such metaphors and their employment at all ontological levels is perhaps found in Engels' remarkable Dialectics of Nature.[139] Therein not only are all the analogies our fifth chapter discussed made explicit, the perspective of the closed system approach is made explicit.

(iii) The Teleological End

Finally, and very briefly, we may consider the issue of the end result of the next qualitative transformation in society. To use systems terminology: what will be the new 'state' of the social system?

We have noted that systems theory cannot 'scientifically' predict a 'development' in the system; it can only consider the 'process' of the system -- a known series of 'permissible' states. In consequence, when discussing any 'new' state, the state has to be shown to in fact fall within the 'structure' of the system (i.e. within one, or possibly a combination, of the permissible states). In this manner any 'predictions' through systems methodology are 'tautological' in that we know that changes must fall within the structure of the system (as that is the only firm indication that our anticipated, qualitative, change is 'scientifically' possible.)

Mode III seems to be, at base, similarly 'tautological' in that the 'new' social order (new state of the system) is clearly an echo of a past (therefore 'scientifically,' 'materially' defensible and demonstrable) state of our social system. As our last chapter emphasized, it is the alienation of man from his own labour and the appropriation of that labour that have marked the history of mankind and have fueled the dialectical contradictions in human society. Only once was man ever 'one' with his productive nature; only in the future will he again enjoy the full appropriation of all social labour by all of society. The return of the value of labour to the labourer himself, the end of alienation through appropriation, and the consequent resolution of the dialectics of contradiction, unite the "primitive communism" of the past with the "communism" of the future.

Of course there are differences between 'primitive' and 'future' communism, but the resolution of the antagonisms rooted in the usurping of labour-value characterizes both realities, and that -- as we have seen -- is both the theoretical and material justification and 'proof' of the inevitability of communism. It is against the division of labour that Marx so rebelled and it is for a world where "nobody has one exclusive sphere of activity but each can become accomplished in any branch he wishes, [where] society regulates the general production and thus makes it possible for me to do one thing today and another tomorrow, to hunt in the morning, fish in the afternoon, . . ."[140] that Marx sought.

Crucially, it is precisely because the labour theory of value is a material theory that it is scientific; and it is precisely because the appropriation of labour can be shown to be a material social phenomenon that we can justify an ethical basis for the desired end of eliminating unequal appropriation of labour through communism. Such a communistic state of social appropriation is not merely a 'wish' -- it is a concrete possibility because it falls within the (material) structure of the human social system. For Marx, anthropology offers this proof. The immediate result is that communism as a 'theory' has a material basis. The further result is that -- like in all systems approaches -- we see that we have in fact returned to the structure of the system to find our 'proof' for the possibility of our projected 'state.'

It is in the above ways that mode III reveals itself to be a 'structural tautology.' In seeking a material basis for theory Marx had to turn to the reality of the structure of the social system, and ultimately winds up arguing that one permissible state (capitalism) can and will be replaced by another permissible state (communism). The proof for this takes the form of a tightly structured 'closed system' -- which the demands of scientific dialectical materialism necessitate. In the end, it is a question of avoiding 'idealism' through avoiding vagueness, ambiguity and randomness. Here we are reminded of the words of B.F. Skinner in Walden Two.

> I deny that freedom exists at all. I must deny it -- or my program would be absurd. You can't have a science about a subject matter which hops capriciously about.[141]

Skinner, of course, comes to terms with the issue and embraces the sort of radical behaviorism which Marx would abhor. Yet in striving for and in advocating human freedom while simultaneously trying to be 'scientific' in the sense of being fully a 'materialist', Marx was forced into a position which -- as we have attempted to illustrate -- shares so much of the limitations (and strengths) of the systems approach. It is in this qualified respect that we suggest that when Novack criticizes Hegel with the words

> In Hegel's idealistic version of the historical process, there was in the last analysis no genuine development from the old to the new, but rather a circular movement from the original pre-existing abstract idea through nature and society to its ultimate fulfillment in the 'concrete' Absolute Idea.[142]

We can counter with the assertion that in mode III's 'materialist' version of the historical process there is in the final analysis also no [or perhaps little] "genuine development from the old to the new." This is a consequence of the systems orientation permeating mode III, and it is in this sense that, again with qualification, we can support Hook's blunt criticism that

> . . . orthodox Marxism, particularly where it invokes the notions of dialectical necessity and historical inevitability, is shot through with metaphysical elements every whit as questionable as the views it criticizes.[143]

TRANSCENDING MODE III: AVENUES OF EXPLORATION

The severity of these criticisms certainly warrants greater attention than our above summary and general casting. Why we do not undertake a detailed exposition here [aside from obvious constraints of time and space] is evident if we recall a central aim of both this entire exercise and of our exposition of mode III in particular: as to the latter point, we note that this work is not undertaken as a 'defense' of mode III against all criticisms or to hold that mode up as a flawless exemplar for blind emulation by all historians -- therefore we feel compelled to offer at least a sketch of what we perceive to be major problems. Vis-à-vis the former point, this dissertation is intended to serve as a heuristic tool and exercise dedicated toward the end of continued refinement (and, optimistically, 'improvement') of historical methodology. If the above criticisms have at least brought to the surface some -- actual or potential --

problems in the mode III synthesis, let us now conclude, however briefly, with an even broader and more general speculation upon possible resolutions to these problems.

Correspondence; Determinacy; Autonomy

We may begin by questioning the central tenet of correspondence. This notion was, and is, extremely useful in two senses. From the 'cosmological' standpoint, correspondence revealed that dialectical processes and material existence permeated all levels of reality [in transformed states] allowing an integrated, 'organic' view of the universe to emerge. Thus, in terms of a 'justification' of the principles of dialectics and materialism, the universe itself -- from man to inorganic matter -- offered apparently irrefutable 'proof' of the validity of the mode III perspective. It is upon such universal validation of dialectical materialism that the 'scientific' status of mode III rests. [Here, again, the congruency with systems theory is obvious.]

Second -- once such a 'correspondence' establishes a 'scientific' basis for the mode III perspective -- the further application of the general principle of correspondence allows mode III to precisely outline general social dynamics. The correspondence between objectively identified relations in the means and relations of production (infra-structure) and the objectively identified social relations (super-structure) indicates more than a mere correspondence: it indicates a causal correlation. This causal correlation is a 'two-way street.' Although the infra-structure is, to use a stock phrase, determining "in the last instance,"[144] the relations within the super structure also exert an influence upon the mode of production. The historians' task is to document all these empirical relations through time in order that the exact mechanics of the dynamic tensions within the mode of production, within social relations, and between the infra and super-structure can be understood. Thus history is capable of providing empirical correlations which will allow limited historical prediction.

This, at first glance, begins to 'open' the system we call social relations as now men can do more than merely adjust to their historical moment. Tampering with the mode of production or with social relations effects the entire system and, given specific conditions, can even result in such an unbalancing of these inherent tensions that a wholesale revolution erupts. The restructured mode of production will result in a new corresponding consciousness in the form of social relations.

Such an event is, however, extra-ordinary in the extreme. First, it is not the result of an individual insight and undertaking, but rather the result of a 'consciousness' which is wholly connected with the mode of production through 'class.' "The existence of revolutionary ideas in a particular period presupposes the existence of a revolutionary class."[145]

Thus any form of conscious interference by men into the process of history is actually extremely problematic. Above all, what might be called the 'scope of possibility' is delimited by the 'historical epoch' one lives in. Human consciousness is never able to fully emancipate itself from the 'illusion of the epoch'[146] it finds itself in. Why this is so is difficult to understand -- given that all relations in the infra and super-structure are empirical. Mode III is never able to communicate these empirical discoveries and to directly, not through the mode of production, dissipate such consciousness. For some reason, only a few are able to free themselves from the ideological shackles of their historical moment. In its theoretical form, this allows us to identify 'progressive' and 'reactionary' individuals and classes in history. In its practical form, it legitimizes the political dominance of the 'proletarian vanguard' in modern communist states.

Precisely how this situation differs from Thomas and Lockett's previously noted observation that "the implicit values in [the systems approach] application are likely to be managerialist, technocratic and reformist" is therefore a difficult question. Does mode III now -- because the 'independent' conditions of consciousness formation are now known and the 'necessary' dialectical course of history clear -- leave room for anything other than mere 'tinkering' with such forces to -- in a neo-mode II fashion -- 'accelerate' the process?

In short, the investigation of the empirical conditions which originally allowed mode III to give conscious human action a chance to 'make' history (in the sense of man being an agent of historical change rather than being trapped in an inevitable historical moment) has degenerated into a rigid neo-empiricism in which the 'science' of historical analysis is left to an elite whose task it is to discover the empirical contingencies of the 'historical moment.' The fact that the system was amicable to empirical analysis originally 'opened' it up to the conscious manipulation of man. Now, the empirical nature of the system has resulted in a study of 'history' which is so technical that it resembles the "dead facts" which Marx somewhere accuses the empiricists of reproducing. The dynamic, dialectical, vitality of mode III has been almost reduced to 'mechanicism.' In a great irony, the very material 'scientific' basis of 'proof' for the dialectical 'dynamism' of reality has inverted upon us and resulted in a rather mechanistic view of man. This is a methodologically logical and perhaps even inevitable result -- as our discussions on systems theory illustrate.

The centrality of the correspondence principle is at the heart of the problem. But how does one abandon correspondence yet still remain 'scientific'? In many ways, this is precisely the crux of the debate between 'humanistic' and 'structural' Marxists. As John Jagodzinski has recently summarized [he uses Althusser as an exemplar of the structuralism position, but the comments are applicable to the entire school]:

> Marxist structuralism envisions man being subordinated by culture (reality) which imposes its order on the subject. . . . the system has a structure of dominance.
>
> . . . base . . . determines the superstructure . . . The infrastructure provides a rationale for the base. . . .
>
> Althusser's structuralism presents a pragmatic theory of truth, applicable for communist technocratic domination. . . . The result is to treat the infrastructure as ideological reflections of the dominant base. His epistemology is largely a problem-solving approach. Praxis, as the application

> of theory to practice to produce a product in the real world, is defined in terms of an instrumentalist theory of truth. (Are the results verifiable because they are reproducable? -- i.e. Do they work in a given context?) This is 'scientific' Marxism because contradictions can be transformed into concrete specific results by the application of theory which alone has an autonomous existence outside the given system. Through theory, the scientist first examines the given ideological situation (Generality I); Generality II identifies the problematic. This means identifying the underlying structure which renders possible the raising of certain questions in a particular form, while ruling out the raising of others. Through the transformative labor of science, the problematic becomes the critique of the existing situation. Finally, the scientific implementation to solve the problem and therefore to transform the situation into the concrete becomes Generality III. This is the knowledge produced by the work of Generality I.[147]

In contrast:

> The post-revolutionary [humanist] communists, Lukacs, Korsch and Gramsci, argued that a materialist dialectic, as presented in its orthodox form (i.e. first by Kautsky and then Lenin; now in its more recent sophisticated structuralist form, with Althusser) was too reductive in its view of man. They questioned the primacy of matter over mind, of objective conditions over consciousness. They sought to re-evaluate the relationship between sense and non-sense, theory and practice. Marxists with a praxiological orientation, gave greater weight to the active conscious side of man. They denied that consciousness was determined by social existence. They argue that structuralists had confused the distinction between 'economic factors' and economic structure.[148]

The debate between mode III 'structuralism' and 'humanism' -- in all its forms -- really boils down to a debate between 'science' in the form of 'correspondence' and 'science' expanded to allow [importantly] a non-idealistic notion of autonomous human ontogenesis.

Of course, structuralism argues that to argue for the latter is to posit an 'ontological split' (so to speak) and consequently to revert to de facto idealism; humanism counters that to not allow such a realm of autonomy is to lapse into mechanicism. In other words, the question centers on human 'freedom': is human existential reality 'determined' or is man able to exercise genuine 'autonomy'?

In contrast to the mainstream of opinion, we do not believe that structuralists are necessarily locked into the position of viewing man as an essentially -- perhaps fully -- reflexive creature, and to an elaboration of that conviction we now turn. Finally, we will conclude with an exposition of 'humanistic Marxism' which argues for a tremendously greater scope of human autonomy, self-determinism and creativity but which -- although it forces us to discard some outdated aspects of Marx's thinking -- is firmly rooted in dialectical materialism and therefore does not lapse into idealism. In setting out these two positions we are not under the illusion that we will have in any final sense 'solved' the debate between the two major competing varieties of mode III. Nevertheless, we do believe that two vital issues will be illuminated. First, although both schools approach the issue from different perspectives, both in fact (to differing degrees) can successfully argue for the existence of a genuine realm of human freedom without abandoning their respective methodologies. In other words, humanists and structuralists are not necessarily doomed to be forever at loggerheads. Second, and more important, we believe that the comprehension of man as a creature guiding his own destiny is a goal of such paramount importance that both avenues of exploration are fruitful and will contribute to an enhancement of human liberation and individual as well as social self-determination.

A Structuralist Argument for an 'Open Universe'

The most potent, in our opinion, argument against naive humanism centers upon the crucial notion of correspondence and takes the following form.

Even if one makes the extremely generous concession that human consciousness and action may be exempt from direct (or 'parallel') correspondence with processes at the inorganic, organic and even 'economic' (means and relations of production) levels, we must still inquire of 'humanists' as to the source and nature of human consciousness and activity. One cannot grant that human praxis is 'uncaused' in the sense that it is purely 'spontaneous' or 'free' activity. The notion of an 'uncaused action' -- as the notion of 'absolute freedom' -- has long been dismissed from serious philosophical inquiry [as a respected professor once so emphatically conveyed to us]. The resolution is obvious to the humanist: human activity, because it is ontogenetic, is its own cause. Accepting that reply, a structuralist can then inquire as to the nature of human theory and practice: is all praxis 'equal' in that it is 'good' because it is [or at least can be] 'human'? This consequence is repugnant to mode III humanism because it leads us right back to 'Russell's dilemma' and into naive relativism. Mode III is firm in its axiological views -- as we have seen.

Thus the mode III humanist may 'ground' his praxis in 'man' -- but ground it he/she must, lest one lapse into relativism. Thus correspondence has not been eliminated -- the locus of reference has merely been changed. Furthermore, because relativism is not acceptable, the 'new' correspondence of 'man with himself' must, in the end, result in the articulation of a (now human) 'base' which becomes the axiological measure in the same way that the labour theory of value is for structuralists. This new base -- although fully human -- is nevertheless not a state of ontological anarchy. This new 'source' for human praxis must still be a 'firm' foundation in that praxis must still be 'scientific' -- therefore material and orderly. As Skinner (and Marx would agree) eloquently phrased it: "You can't have a science about a subject matter which hops capriciously about."[149] The crucial term is 'capriciously.'

The key is to be found in the notion of 'order.' 'Autonomy,' in any variety of mode III, does not imply 'absolute' freedom in the sense of chaos or anarchy. Structuralists find fairly precise correlations governing the human existential condition through employing the principle of correspondence; humanists wish to grant man much greater leeway in his existential life -- without, however and emphatically, lapsing into the void, the '*Angst*,'[150] of existentialism. It is, then, a problem of: is it possible to have any sort of 'freedom' without relinquishing the principle of 'order'? We propose that it is possible to retain the principles of order and of correspondence -- thereby making a greater case for the material validity of our assertions -- while simultaneously materially 'grounding' (verifying through demonstrating correspondence) the assertion that a significant degree of human freedom -- 'freedom' understood as genuine, self-initiated and self-regulated existential choice -- exists.

Our belief rests on the premise that the principle of correspondence is indeed necessarily reductionist; but this becomes inhibitive of all human autonomy (i.e. leads to 'determinism') only if it is based upon an a priori -- and possibly mistaken -- perception of 'order.' Specifically, order becomes synonymous with terms like 'absolute predictability,' 'determinacy,' 'mechanicism,' etc. only if we accept either of two of what are today's three major theoretically plausible views of material reality: the perspectives articulated by Newton, Einstein and Heisenberg.

Marx lived in a 'Newtonian universe'* where the objective of 'science' was the formulation of precise laws. Although Marx argued with the 'atomic' conceptions inherent in the Newtonian system, he certainly did not quarrel with the criterion of precision. As we have seen, the very basis of scientific socialism hinges on the claim that the underlying basis -- the means and relations of production -- of human existential reality "can be determined with the precision of natural science."[151] The necessity of such absolute precision -- resting upon the notion of the universe as absolutely orderly, stable, predictable, etc. is shared by Newton, Einstein and Marx (all in remarkably different ways) but not by Werner Heisenberg. If, for the sake of this discussion, we accept Heisenberg and if we apply the criteria of 'correspondence' to our aforementioned three ontological and epistemological levels -- and again rely upon systems theory -- we can: (i) deliver mode III from the criticisms rendered under our discussion of that mode as a 'structural tautology', (ii) we can retain the fully scientific status of dialectics and materialism and (iii) we can offer tentative material 'proof' for a realm of existential autonomy. Of course, again, we are arguing from a 'structuralist' perspective and method.

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* It is recognized that the gradual supplanting of the Newtonian physical system by the Einsteinian model is rapidly resulting in the former's loss of 'paradigm' status, so to speak, and relegation into the annals of outdated scientific models. However, the functional utility of the Newtonian model is still tremendous, and we include it for that reason -- as well as to illustrate the linkages with Marx's era and writings.

The core of Heisenberg's perspective -- which we shall refer to as the 'indeterminacy principle' or 'quantum theory' -- is summarized by Einstein:

> The aim of the theory is to determine the probability of the results of measurement upon a system at a given time. On the other hand, it makes no attempt to give a mathematical representation of what is actually present or goes on in space and time. On this point the quantum theory of today differs fundamentally from all previous theories of physics, mechanistic as well as field theories. Instead of a model description of actual space-time events, it gives the probability distributions for possible measurements as functions of time.
>
> . . . Heisenberg has convincingly shown, from an empirical point of view, that any decision as to a rigorously deterministic structure of nature is definitely ruled out, because of the structure of our experimental apparatus. Thus it is probably out of the question that any future

> knowledge can compel physics again to relinquish our present statistical theoretical foundation in favor of a deterministic one which would deal directly with physical reality.152

Or, as Bernard d'Espagnat puts it: "A singular feature of quantum mechanics is that its predictions generally give only the probability of an event, not a deterministic statement that the event will happen or that it will not."[153]

The affront to the Newtonian world view is obvious; Einstein too explicitly rejected any such suggestion that "we must accept the view that events in nature are analagous to a game of chance."[154] It was not, interestingly and importantly, that Einstein argued with Heisenberg's data: rather, he himself acknowledges that his conviction in favor of strict determinism is a "belief."[155] As Cornelius Lanczos summarizes:

> To assume that everything in nature is only statistical, that all our predictions in physics can only be based on the law of large numbers because the elementary processes of nature are governed by nothing but chance, was something that he [Einstein] could not reconcile with his own way of thinking. 'The Lord does not throw dice' was the way he expressed it. From time to time he came out from his isolation and raised his voice in favor of that strict determinism without which he could not envisage rational science. But in every case he was the loser and soon he realized that he and his antagonists spoke two fundamentally different languages. Then he gave up any further bickering, without modifying his own unalterable convictions.[156]

The association of 'precision' with absolute 'order' and with 'determinism' -- and of all three with 'science' -- is a deep-rooted conviction. Abandoning determinism and precision in favor of Heisenberg's ideas -- derived from 'quantum theory' -- is unsettling because that perspective has, as d'Espagnat phrases it, "attendant epistemological hazards."[157] True, Heisenberg's theory is a theory addressing inorganic, physical reality -- more specifically sub-atomic phenomena -- but through 'correspondence' we can readily see the same principles manifest themselves at other ontological levels. Heisenberg himself was sensitive to this, as he was certainly aware that there is great inter-penetration of 'scientific' ideas and general social thought. This is clearly evidenced especially in his very eloquent conclusion to Physics and Philosophy.[158] Such an epistemological congruency of 'scientific' and 'social' thought was also keenly perceived by Niels Bohr -- the author of the famous 'Copenhagen interpretation'[159] of quantum theory. As Patrick Heelan in Quantum Theory and Objectivity notes:

> The period of crisis in physics which led to the construction of the quantum theory was viewed at the time by those intimately connected with it, not merely as a change in physics, but as a change in philosophic perspective about man, reality and human knowledge. Bohr, impressed by the difference between our everyday vision of a solid material world and the description given of it in quantum mechanics, came to the conclusion that a physicist can no longer take an uncritical attitude towards truth, reality and human knowledge. All our expressions as he wrote, "bear the stamp of our customary forms of perception from the point of view of which the existence of the quantum of action is an irrationality . . . In consequence of this state of affairs, even words like 'to be' and 'to know' lose their unambiguous meaning."[160]

Bohr's insight is most lucid, a recognition of the simultaneous and inseparable ['dialectical,' in mode III terminology] interplay of ontology, epistemology and praxis. Let us now apply the significance of Heisenberg's indeterminacy principle to our three levels of ontological transformation and epistemological significance.

At the first level, we must recognize that not only is matter itself 'unpredictable' (for lack of a better term) in that inorganic reactions and resolutions of dialectical forces of tension are not 'absolutely orderly' (in the Newtonian or Einsteinian senses) but, equally important, our very perception of matter (i.e. that edifice of knowledge and method we call 'physical science') is itself an influence upon matter. Above all, the very act of observation is an 'influence' upon matter. As Heelan notes, in Heisenberg's view

> the instrument through which we look disturbs what is out there and that we see, consequently, not what is there but something which is in part at least a product of the act of observation. 'When we speak of the picture of nature in the exact science of our age,' he [Heisenberg] wrote, 'we do not mean a picture of nature so much as a *picture of our relationships with nature*.'[161]

It is for this reason, Harold Morowitz explains, "Heisenberg stressed that the laws of nature no longer dealt with elementary particles, but with our knowledge of these particles -- that is, *with the contents of our minds*."[162]

Marx was not privy to such an insight, and he viewed 'nature' as an autonomous realm and 'science' as 'objective' knowledge of that realm -- much in the classical, positivistic, manner. This left inorganic matter a 'closed system': a mode of 'reaction' wherein dialectical, material, processes worked themselves out through inherent and 'lawful' (i.e. absolutely orderly and precise) processes. Considering Heisenberg's ideas forces a reconception of physical reality itself as an 'open system,' and leads us to agree with

Richard Mattessich that

> there is the theoretically important distinction between an open system, permitting inputs (matter, energy, information) from the environment and outputs (transformed matter, energy, information) to the environment, and a closed system which is self-contained, permitting neither inputs from, nor outputs to, the environment. In practice the entire universe seems to be the only true closed system, hence the predominant interest, of systems research, in open systems.[163]

We may conceive, building upon Heisenberg, that the system of inorganic nature is 'open' in two senses: 'endemically' and 'environmentally.' That is, first, because matter itself must be conceived of as exhibiting dynamic processes which are not 'absolutely precise' fluctuations but rather 'unpredictable' fluctuations within a 'general range' of parameters (i.e. the 'boundaries' of the system), 'spontaneous' -- so to speak -- 'emergent phenomena' can be the result of such 'random' internal activity of the inorganic system. That is why, as Bowler suggests, it is desirable to think of an "open-ended universe":

> We don't know what comparable negentropic processes may be going on in other parts of the universe, but the process on earth indicates that the universe is open-ended in the direction of evolving complexity. The more complex the system, the larger the requirements for energy, but the abundance of energy being radiated from all the suns of all the galaxies suggests that the limits haven't been tested yet. Further, the pattern of emergent novel characteristics suggests that the universe is unpredictable with reference to a new level of complex systems. It is not likely that an exhaustive study of atoms of hydrogen and oxygen could have predicted the characteristics of water without knowledge of some comparable synthetic system on the same level. Even then, the prediction would be

> only a calculated guess. In short, a general systems view reverses the old philosophic self-evident truth that the cause must be greater than the effect. On earth, the effects are continuously greater than the cause, i.e., as long as great is equated with negentropic complexity.[164]

Inorganic nature is, furthermore, 'open' in an 'environmental' sense in that the very observation of matter is an influence upon matter. This is the heart of Heisenberg's conceptual revolution and his critique of 'objective' and 'deterministic' perspectives. As he notes [after discussing the development of the Newtonian world view]:

> Thus was formed the solid framework of classical physics, and thus arose the conception of a material world in time and space comparable to a machine which, once set in motion, continues to run, governed by immutable laws. The fact that this machine as well as the whole of science were themselves only products of the human mind appeared irrelevant and of no consequence for an understanding of nature.165

Equally important is the realization that combining Heisenberg and the systems approach results in a type of integrated and holistic world view which mode III so seeks to effect. Because even inorganic matter is now an 'environmentally' open system (i.e. man himself effects that system) the dialectical unity of a wholly material universe is much more clearly evidenced.

Turning to our second level, we see in 'dialectical ecology' corresponding endemic and environmental dialectical open systems processes. Neo-Darwinism has amply outlined how organic nature is an open system because species must 'adapt' to their surroundings. But is anything corresponding to the 'random,' endemic, processes of inorganic nature to be found at this level?

For the sake of illustration, we may note but two biological evolution theories -- the 'neutral theory of biological evolution' and the 'transposable genetic elements' theory -- which fully correspond with the indeterminacy principle. As Motoo Kimura writes:

> The Darwinian theory of evolution through natural selection is firmly established among biologists. The theory holds that evolution is the result of an interplay between variation and selection. . . . species evolve by accumulating adaptive mutant genes and the characters to which those genes give rise.
>
> [The neutral theory of molecular evolution holds that] most of the mutant genes . . . are adaptively neither more nor less than the genes they replace; at the molecular level most evolutionary changes are caused by the 'random drift' of selectively equivalent mutant genes.[166]

Consequently, "at the molecular level most evolutionary change and most of the variability within a species are caused not by selection but by random drift of mutant genes that are selectively equivalent.[167]

In reference to the theory of 'transposable genetic elements,' Stanley Cohen and James Shapiro argue:

> Until recently mutation and homologous recombination . . . appeared to be the only important mechanicisms for generating biological diversity. They seemed to be able to account for the degree of diversity observed in most species, and the implicit constraints of homologous recombination -- which prevent the exchange of genetic information between unrelated organisms lacking extensive DNA sequence similarity -- appeared to be consistent with both a modest rate of biological evolution and the persistence of distinct species that retain their basic identity generation after generation.

> Within the last decade or so, however, it has become increasingly apparent that there are various 'illegitimate' recombinational processes, which can join together DNA segments having little or no nucleotide-sequence homology, and that such processes play a significant role in the organization of genetic information and the regulation of its expression. Such recombination is often effected by transposable genetic elements: structurally and genetically discrete segments of DNA that have the ability to move around among the chromosomes and the extrachromosomal DNA molecules of bacteria and higher organisms. Although transposable elements have been studied largely in bacterial cells, they were originally discovered in plants and are now known to exist in animals as well. Because illegitimate recombination can join together DNA segments that have little, if any, ancestral relationship, it can affect evolution in quantum jumps as well as in small steps.[168]

Respectively Kimura, and Cohen and Shapiro, summarize the implications of these theories:

> Although this random process is slow and insignificant in the time frame of man's ephemeral existence, over geologic time it makes for change on an enormous scale.[169]

And,

> Genetic rearrangements can have biological importance on two time scales: on an evolutionary scale, where the effects of the rearrangement are seen after many generations, and on a developmental time-scale, where the effects are apparent within a single generation.[170]

Again, the organic integration of our three levels is evident: not only is there correspondence of 'endemic' processes between the organic and inorganic levels, but the 'input' of man into the biological sphere is so well known in today's ecologically conscious society that it does not warrant elaboration. To again emphasize the former point, and to clearly add that there is also 'interaction' between the first and second level systems, we cite the interesting and instructive scenario Morowitz draws:

> The encoding of information in genetic molecules introduced the possibility of profound disturbances in the laws that governed the universe. Before the coming of genetic life, for example, fluctuations in temperature or noise were averaged out, giving rise to precise laws of planetary evolution. Afterward, however, a single molecular event at the level of thermal noise could lead to macroscopic consequences. For if the event were a mutation in a self-replicating system, then the entire course of biological evolution could be altered. A single molecular event could kill a whale by inducing a cancer or destroy an ecosystem by generating a virulent virus that attacks a key species in that system. The origin of life does not abrogate the underlying laws of physics, but it adds a new feature: large-scale consequences of molecular events. This rule change makes evolutionary history indeterminate and so constitutes a clear-cut discontinuity.171

Turning finally to our third level -- historical materialism -- we see the correspondence of human with other universal processes -- in an appropriately qualitatively unique form. Because, as mode III emphasized, the mode of production is a mode of consciousness -- a mode where man 'makes himself' and his world -- the principle of indeterminacy opens up the door for a 'scientific' description of the reality of human 'autonomy'.

With the advent of human consciousness we have the advent of the crucial capacity for 'projection,' making the 'system' of human, social, reality the most 'open' system of all. Although the human mind is capable of grasping real determinants of man's existence, man is nevertheless silumtaneously the 'creator' of his own environment. These seeming contradictions can find resolution in open system theory. Such contradictions are precisely the "puzzle" of open systems theory, as Gerald Weinberg discerns:

> Open systems baffle us, and we prefer to think of our systems -- or create our systems -- to be as closed as possible. Openness is a puzzle because it complicates prediction and observation, yet at the same time it lets us gain predictability by acting on the system.[172]

Let us illustrate through a hypothetical (and admittedly simplistic) example how we can gain predictability by acting on a system while simultaneously 'complicating' that system. Recalling that a system can be endemically and environmentally open, we can speculate that human society is 'disturbed' by an 'unpredictable' occurrence: a mutant virus begins to exact a devastating toll on human life; this causes a tremendous instability in the human social system -- much like the ravages of the 'black death' in Europe. Now, this is a 'chance' event, but it can be a man-made chance event if, for the sake of argument, the virus was a result of research in germ warfare -- or the currently much-discussed recombinant DNA experiments. This alone illustrates that 'unpredictability' is an inherent part of the human social system -- but in a qualitatively different form from corresponding unpredictability in our other two levels. It is the conscious initiation of such research and experiment programs which resulted in a totally 'random' disturbance on the system. [In the case of recombinat DNA research it is precisely the task of the experiment to effect random mutations -- which are then 'observed.']

In reaction to the effects of the virus society, we can assume, would muster all available resources and direct all activities toward the preservation of what is left of human life on the planet. Now the 'standard' tools of science would study the virus as an 'orderly' phenomenon exhibiting 'characteristic traits,' etc. -- i.e. we analyze it as a 'closed' biological (level two) system. Assuming a cure is found, mankind would -- we can safely presume -- seriously rethink the advisability of repeating such experimentation -- especially if (to further stretch our imagination) such a catastrophy had happened not once but twice or three times before.

What has happened here is that a 'random' occurrence(s) has resulted in a clearly 'predictable' possibility (the fear of extermination of human life itself) and mankind accordingly changes the system of society itself (i.e. outlaws specific forms of biological research) to avoid the possibility of what clearly is a 'scientifically' based projection (the physical end of humanity).

Clearly the above scenario is repleat with 'order' -- but it is not a deterministic order. As D. Bohm notes: "It is important . . . that order is not to be identified with predictability. Predictability is a property of a special kind of order such that a few steps determine the whole order."[173] It is precisely in the 'inevitability' of the next 'step' (the 'communist revolution') based on the material evidence of the previous 'few steps' (the succession of past modes of production) that rightly bothers the 'humanists' in the mode III camp. The fallacy of this view lies in the fact that such projections are based upon a form of "absolutism" (i.e. belief in absolute order, predictability, determinism, etc.) which refuses to recognize the indeterminacy principle in any form.

Weinberg would term such an orientation a "linear systems" approach. We cite at length:

> . . . absolutism . . . dies hard. A . . . sophisticated attempt to preserve some notion of stability 'in the system' is the concept of a 'linear system.' A system is linear with respect to a particular input if increasing that input merely changes something in the system by the same amount. In functional form, if the 'response' of the system is given by
>
> $$F = f(I)$$
>
> where *I* is the input, then if *f* represents a linear system,
>
> $$f(2 X 1) = 2 X f(I)$$
> $$f(1000 X 1) = 1000 X f(I)$$
>
> or, in general:
>
> $$f(a X 1) = a X f(I)$$
>
> for any conceivable value of *a*.
>
> The linear-system concept, like the closed-system concept, is an extremely valuable approximation, one that should ultimately be studied with care by all systems thinkers. Its importance for stability lies in its removal of the relative concept 'small disturbance,' because as long as the disturbance is *finite*, the behavior will be of the same *sort* as before, even though bigger. For instance, if my hi-fi is linear and I turn up the sound, the music is louder, but not distorted -- and I can keep turning up the sound without ever hearing anything that was not in the original music.
>
> Unfortunately, the linear-system concept, though helpful in systems thinking, simply pushes the absolutism further into the shadows. No system we know is strictly linear. If I turn up the volume far enough, distortion of the music is bound to result. My hi-fi may be designed to prevent me from turning the volume knob that far, or may simply stop working to prevent me from damaging the loudspeaker, but these are both nonlinearities intended to keep the music in the linear range. What the linear-systems approximation

> really says then, is that the system is linear 'as long as it stays within reasonable bounds.' But what are these 'reasonable bounds,' and how can I discover them without first reaching nonlinearity?
>
> Another problem with the linear-system approximation is that a system need not be linear to be stable. By confining our attention to linear systems we would fail to notice large classes of systems that display stable behavior. We use the linear-system model not because we find the world to be particularly linear. As with other approximations, we easily fall prey to believing our model more than the empirical world, with the result that we may be unable to 'see' nonlinear systems, just as we are unable to 'see' nonthing systems.
>
> For example, linear systems have the convenient property of 'super-position.' If we put two of them together, the result is a linear system, at least if we stick to the rules of 'putting together.' For example, if we have two systems:
>
> $$R = f(I) \qquad S = g(I)$$
>
> both of which are linear, then we can put together
>
> $$T = R + S = f(I) + g(I)$$
>
> which is also linear. Or, going backwards, we can decompose a linear system into systems that retain the property of being linear.
>
> Superposition is a handy property, as far as it goes, but it may lead the careless into fallacious arguments about nonlinear systems.[174]

The point demanding appreciation is that the 'system' we call the mode of production is the result of human activity -- activity which mode III has recognized to be an orderly progression of systems (previous modes of production). However, we must recognize that this insight was gained through looking both into the present and the past -- or, to use Weinberg's words, we have "decompos[ed] a linear system into systems that retain the property of being linear." This, however, does not take into account the consequence of this insight itself. As Brown nicely phrases it, a "test" of any "models" of social reality should be "the test of the human energy generated by them."[175] Certainly, as Brown acknowledges, the 'Marxist' perspective has 'energized' human activity and transformed the sociopolitical face of our planet. That conscientization is now part of our social reality and -- like our example of a world rebelling against its own history because that history included a structural component which was contributing upheavals in the form of plagues -- it is now a consciously known factor which can effect the 'linear' characteristic of the progression of history. As V. Kiernan has written:

> By forseeing the future we alter it and then falsify our prophecies. Marx does this by correctly predicting what would happen to capitalism if it continued on its actual line.[176]

This is precisely the sort of "puzzle" Weinberg refers to above. Mode III, by discovering the underlying 'determinants' of the human social system allowed us to "gain" predictability of that system. Ironically, the simultaneous consequence is that such knowledge also "complicates" the system -- and our knowledge of that system -- because it allows us to 'interfere' with that system to significantly effect what are fully material and 'scientific' predictions. Such is the role of human consciousness and our ability to 'project' various outcomes.

There is nothing in our above comments which gives any hint that social reality is not orderly, or that dialectics or materialism are incapable of offering full explanations of our existential social condition. Yet the indeterminacy principle [in its uniquely human/social form] and the wonder of how mankind constantly reifies its own productive, conscious, activity into a social environment which acts upon that very consciousness [in a form of 'open system' which sees mankind as simultaneously product and producer of its very being] forces us to reject the notion of absolute determinacy as a naive criterion of 'science.'

It is the above sorts of considerations which bolden some open systems theorists to recognize man as a 'creative' creature without ever abandoning 'scientific' criteria.[177] It is in the above spirit that an open systems theorist such as Bowler can even more boldly -- and again without relinquishing 'science' -- speak of an "open-ended universe" and refuse to shackle man (or nature, for that matter) with the bonds of absolutism:

> Consciousness, as it occurs in the human psychic system, is a novel emergent on the earth. As far as we haveany information, the universe has become conscious of itself for the first time through human psychic systems. . . .
>
> From this perspective, the significance of man's role changes. The human psychic system is a synthesizer of new systems and gradually he has altered the equilibration processes which had evolved in the earth-sun system. . . . Man has taken over part of the control subsystems of the earth-sun system. He preserves life systems that would not have otherwise survived. He destroys many living systems that were part of the total equilibration process. He is just now becoming aware of some painful problems. If one decides to preserve life, one is inevitably confronted with the question of when to end life. Things that were comfortably left to God or nature are clearly the responsibility of man. He has become a

> significant part of the control system and he isn't very comfortable with the role. . . .
>
> In addition to the problems of equilibration, systems theory suggests that the universe is open-ended in the direction of synthetic novelty. That doesn't mean that all things are possible, but it does mean that there are always some other possibilities. There is no cosmic or genetic chart for the proper programming of a human psychic system nor is there such for the proper structure and control of social systems. Man has open before him a variety of possible futures.[178]

Because, as Bowler notes, not "all things are possible" but "there are always some other possibilities," and because as Aron Katsenelinboigen notes "if there is no change, there is no creation. But only selected changes can be viewed as creative,"[179] we can readily perceive the need for some form of "hermeneutic-dialectic" science and philosophy which Radnitzky sensitizes us to. We need not merely 'believe' we have choices; we need only turn to the human condition -- and 'correspondences' in the rest of material reality -- to recognize that absolute determinacy is as much (and as outmoded) a legacy of Newtonian mechanicism as is atomism and absolute time and space. If we refuse to confine consciousness within a closed systems model, we will be well on our way

> . . . toward increasing emancipation and transparence; the self-awareness of human agents that helps them to emancipate themselves from the hypostatized forces of society and history, their understanding of historical situations, the consciousness which societies have of themselves, etc.
>
> . . . Hermeneutic-dialectic philosophy not only concentrates on the human sciences, but it has developed in symbiosis with the human sciences. Hermeneutic-dialectic philosophers insist that

> the human sciences be developed in such a way that they become maximally relevant for moral and social practice.[180]

Quantum theory and the indeterminacy principle served as our springboard toward perception of the 'openness' of the "hypostated" social/historical forces, and the conclusion that human social/existential reality is open to genuine experiment. The nature of the experiment is limited only to human imagination. It is true that human imagination is in turn presently limited by a past and present historical legacy, but if we shed ourselves of the 'inevitability' which a 'linear systems approach' oracles the situation can rapidly change and alternatives can proliferate. Humanity can begin to have a choice in the determination of its very consciousness, in the creation of its very existential being. The theoretical and material validation for such 'autonomy' is provided by the 'indeterminacy principle' and the concept of 'endemically' and 'environmentally' open systems theory.

Thus perceived, historical action becomes purposeful action -- action in which men/women make, not merely 'accelerate' or 'live out' -- history. At this point the method and subject of 'history' become one. The vision is a powerful one, and even two 'determinists' like Bowles and Gintis recognize that "to speak of social change is to speak of making history."[181]

However, in closing, we must emphasize the tentative nature of the above possibility. To provide a broad theoretical justification and skeletal methodological framework for such a transcending of mode III as we have above is one thing; to ignore the possibility of error is another. We have stated our conviction that the issue pivots around the central, material, concept of 'order': is the order in the universe 'absolute' or 'indeterminate'? Is, to take license with a borrowed phrase, the 'indeterminacy' we relied so heavily upon simply a measure of 'observer ignorance'[182] of the precise workings of any given system? It is too early to tell; the material evidence continues to be gathered. As the process of information accumulation continues, 'determinists' find solace in the indisputable fact that what may be called the calculable 'margin of error' -- which they feel the indeterminacy principle merely points out -- continues to shrink as science 'progresses.' On the other hand, 'humanists' may take refuge in remembering that -- to look at things from another perspective -- this 'realm of autonomy' from Newtonian absolutism continues to assert its existence and stubbornly refuses to confirm Einstein's presumably still unrelinquished hope.

A Humanistic Defense of 'Freedom'

Mode III humanists, however, are not content to hide in the ever-shrinking space that structuralists perceive to be a mere 'margin of error.' They fully recognize that what we above rather kindly termed the 'realm of autonomy' is in fact no such thing: the above may be an argument which frees man from determinism, but we are not left much better off because we become victims of random flux. After all, in the final analysis, to argue from Heisenberg is to argue for, to a greater or lesser degree, 'ontological anarchy.'

Therefore while our above discussion closed with an argument for the 'opening' of the human system to conscious human input, humanists remain dissatisfied on two accounts: first, the degree of human freedom so afforded they recognize to be minimal at best -- and mere tokenism at worst. Second, and of direct consequence, humanists reject the basic form of argument utilized by structuralists as they perceive it to be methodologically flawed. We now turn, by way of conclusion, to a representative humanist defense of human freedom.

To begin, humanists may argue that structuralist arguments such as that outlined above gloss over a real contradiction in the writings of Marx:

> The Marx who upholds the role of the individual in history, the Marx who treats 'history' as a hypostasis, the Marx who identifies history with men's conscious activity: what a contrast with the stereotype of Marx writing only of classes and class struggle, objective laws of historical development, its economic determinants inclusive of human consciousness, and so on and so forth. Yet this is a perfectly genuine Marx, and, moreover, a point of view that was continually reiterated not only to the end in his work but also by Engels.[183]

Such a contradiction is not a 'pseudo-problem': it exists not only in Marx but in social reality itself.

> Ordinary observation no less than scientific observation, reveals two sets of facts whose apparent contradiction demands reflection. On the one hand, we have human individuals acting in a conscious and purposeful manner and commanding, as we know from our own experience, a wide range of choices; on the other hand, there is historical development, which often runs counter to these endeavours and obviously conditions the choices made by men in their conscious actions.[184]

In seeking a solution to this problem humanism charges that structuralists come to a denial of the contradiction and fall into the positivistic and formalistic trap of subsumption of the dialectical antipathies of a whole within one category. That is, by making human consciousness wholly reflexive of an 'independent' and 'objective' social 'reality,' human consciousness and activity in all their forms become mere sub-classes of a larger, inclusive, reality. Ergo the so-called 'vulgar Marxist' reconciliation of 'base' and 'superstructure' through insistence that base 'determines' superstructure. Thus, in one bold stroke, contradiction has been eliminated and the 'real' focus of 'scientific' materialism becomes the study of the economic infrastructure which, to borrow a phrase, determines "in the last instance" all existential dimensions of the human condition. 'Structuralism' therefore studies the 'structure' of society because it is that structure which ultimately 'causes' all changes.

The humanist critique centers on the charge that while such investigation may be scientific and material, it is not dialectical. It is not dialectical because the very source of the generation of the antipathies which constitute the dynamism of the mode of production -- human activity -- has been made a dependent variable and we have therefore lapsed back into a linear, positivistic, notion of causality. Consequent attempts by structuralists to recapture the dynamic, revolutionary, elements of a truly dialectical perspective have resulted in what Piccone has termed an unfortunate "marriage" of dialectics and structuralism:

> That the dialectics-structuralism marriage was . . . impossible . . . had already been shown by Konrad . . . when he pointed out that the totality dealt with by dialectical logic is radically different from what he called the 'bad totality' of structuralism. The reason for this is that whereas the totality of the materialist dialectic is a process of creation of spiritual and material reality and, at the same time, a process of creation of man as a subject, the bad totality of the structuralist is a mechanical combination of autonomous pre-constituted structures that reciprocally effect each other only externally. The attempted junction of the dialectic and structuralism in a mechanical fashion could only be envisioned by those who are either ignorant of the nature of the dialectic or structuralism, or of both.[185]

The consequences of the above totally permeate the methodology of structuralism, and have profound ontological, epistemological and praxiological manifestations. As Piccone further notes:

> The dialectic, . . . as Marx indicates in his famous eleventh thesis on Feuerbach, becomes a theory of radical revolutionary change, but only at a certain determined historical point when the nature of the object itself is such as to allow the kind of subject-object relationship that Marx calls the revolutionary praxis. Concretely, the object has already a constituted structure -- constituted by previous human activity -- and it is precisely because these structures (society, science, etc.) have been constituted by previous generations that they are always in need of being reconstituted anew, for only as such are they ever truly validated. What Husserl calls the crises of the European sciences is the methodological denial of just such a reconstitution by the Ideenkleid of scientistic objectivism which posits its own categorical constructs as objective being, thus preventing any questioning of such constructs and, consequently, producing the counterfinality that, whereas they were originally meant as means of human emancipation, with the occlusion of the immediate (or of the Lebenswelt), they come to prevent precisely that emancipation that they were meant to accelerate. . . .[186]

That is, the ontological fallacy is charged to be that structuralism has given its categories the same a priori, 'objective,' independent of man, ontological status as positivism bestowed its atomic entities with. The epistemological fallacy is seen to be rooted in a return to the positivistic notion of 'truth' as 'discovery' -- i.e. of investigation of the ontologically given. The praxiological corollary is that human action and thought become reflexive in the behavioristic sense. Humanists see a way to avoid such pitfalls, and Piccone above uses such phrases as "revolutionary praxis" and "human emancipation" to indicate that there is a manner in which the driving force of social change -- human activity -- can be recognized as such.

The solution lies in recognizing that the form of structuralist argument we utilized in the previous section in fact offers one variety of a formal critique to incorporate the logical criteria of a post-Hempel model of scientific method where the developments of modern science are consciously recognized and the need for correspondence is consciously held to be a necessary criterion of being 'scientific.' The notion of correspondence 'locks in' -- so to speak -- ontological levels within an epistemological matrix which treats both the object of study ('reality' -- social, organic and inorganic) and the method of studying such reality ('science') as 'givens' which the subject undertaking such study (man) must conform to if he/she dares claim to be a 'scientific materialist.' Obviously the dialectic is lost in all this, but we can regain it -- and thereby regain "revolutionary praxis" and continue with "human emancipation" -- if we but recognize that a fundamental law of dialectics (one we have consciously ignored to this point) is the negation of the negation. It is this law which is the criterion enabling us to retain dynamics; it is this insight which Kuhn effected in the realm of the inorganic sciences; it is this criterion which recognizes the phenomenological and sociological dimensions of inquiry. In short, with the negation of the negation we can conceive of how the 'rules' (to use a borrowed phrase) for being 'scientific' change; how the actual 'objects' of such scientific investigation change; and how man's actual reality -- one's mode of perceiving self and environment, with all attendant affective changes -- changes.[187]

As Piccone notes:

> The traumatic nature of this process in science has been described by Thomas S. Kuhn . . . In terms of the dialectic, all such revolutions take place in man's historical process of self-creation and are expressed in fundamental reconstitutions of the base-superstructure relationship.[188]

Thus both the structure and man (as a knowing and acting creature) change.

The degree to which Marx was cognizant of all this is problematic. He was, after all, a man of his own time as well as a revolutionary thinker. We feel it is safe to say that he viewed 'science' in a fairly 'linear' manner -- much like Popper today. Indeed, it was his desire to be as 'scientific' as possible as he desperately sought 'proof' for his radical views. Nevertheless, Marx was fully aware that "no development can take place in any sphere unless it negates its old forms of existence."[189] It is our contention that Marx did go a very considerable distance in breaking the shackles of positivism, of going beyond the criteria of correspondence, and even in going beyond a closed systems perspective.[190]

We have seen how Marx struggled to articulate dialectical materialism as an advance upon materialism. We have also witnessed how -- in falling back upon the 'legitimacy' the powerful positivistic model provides for investigation, he relied very heavily upon the criteria of correspondence. We must, however, take care to recognize that 'correspondence' is to be differentiated from 'identity.' The general laws of dialectics and the primacy of materialism do take many concrete, qualitatively unique, forms. Thus Marx's dialectical materialism relied upon the linking concept of 'correspondence' as a heuristic tool to illuminate the 'wholistic' (in the sense of 'organic unity') nature of reality in all its dialectical and material manifestations. That is not, however, any variety of reductionism à la mode I. And finally, we recognize that Marx was going beyond closed systems thinking in that he was doing more than merely 'internally' criticizing capitalism. While capitalism is indeed locked into a closed systems consciousness as a result of the centrality of the labor theory of value, it is also true that the Grundrisse outlines -- very generally -- alternate modes of production. Marx anticipated what we may term -- to use a borrowed phrase -- the 'psychoanalytic insight.' What is Marx's contribution if not that he showed us how to grasp consciously those determinants of our condition which were operating at an unconscious level (i.e. the mode of production as a mode of consciousness and action)? This insight itself is enough to 'open' the system and to begin to allow us to control the direction of our own evolution.[191] [See for instance Habermas' Legitimation Crises[192] wherein the conscious questioning of what we wish to retain from other modes, while ushering in a new, is paramount. This is the perspective of critical phenomenology -- which places man in the position of active creator of his social and existential reality.] The principle of the negation of the negation shows that the 'return' of man to a state of 'communism' is not really a return after all as there is no necessity for man to 'justify' a revolution in the mode of production by arguing that the new state is 'legitimate' because it is a 'permissible' state [as per our discussion on Marxism as a variant of systems theory]. As Gurvitch stresses, Marx does not use "the dialectic as the apology for the end of history."[193] Rather, as Piccone notes, "Marx never spoke about the end or goal of history, but only of the end of the pre-history of mankind."[194]

The "end of the pre-history of mankind" will be precisely the time that men finally recognize their individual and collective role in the construction of reality and their self-assigned existential roles within that reality. By making the hitherto unconscious ['unconscious' not understood in a 'mentalist' or non-material sense -- rather in the sense of the material, dialectical, relations of the mode of production] conscious, men are in a position to be 'liberated' from their inherited historical condition in the sense that they can enter into a critical reflection upon their own evolution.

Concluding Remarks

In spite of the great differences between the 'structural' and 'humanistic' varieties of mode III, it must be stressed that both are wholly concerned with the realities and possibilities of the human condition. If nothing else, certainly mode III has 'humanized' inquiry by squarely placing man as the proper subject of history and inquiry -- something modes I and II failed to achieve. By closing our discussion with a focus on human freedom and self-determination, we hoped to illustrate that the internecine warfare mode III is experiencing must never be allowed to cloud recognition of either what an improvement mode III is over modes I and II, or the hope it offers for the building of a better future. It is this possibility which Fromm strives to communicate when he reminds us that

> historical development has proven how dangerous the neglect of certain aspects of Marx's philosophy has turned out to be. Marx was one among the great humanist philosophers who, like the humanists from the Renaissance up to those of our day, have stressed the idea that all social arrangements must serve the growth and the unfolding of man; that man must always be an end and never a means; that each individual carries within himself all of humanity; that human progress in science and in art depends on freedom; that man has the capacity to perfect himself in the process of history. The main difference between Marx and his great humanistic predecessors does not lie in their concept of man and the goals for his life, but in the idea that these aims cannot be realized only by

> teaching, but that necessary economic and social changes are required which will permit and further the fullest development of man. It is an ironical fact that the main accusation against Marxism in the capitalist countries has been his "materialism"; this is ironical because it was precisely Marx's aim to fight the materialism engendered in bourgeois life and to create a society in which man -- the creative, "self-active" human being -- is the summum bonum, in which the rich man is the one, as Marx put it, who *is* much, and not the one who *has* much.
>
> Our industrial civilization, both in the socialist and in the capitalist areas of the industrialized world, has led to an ever-increasing neglect of man. Man has become alienated from his work, from his fellowman, and from himself; he transforms himself into a thing, occupied with production and consumption. Unconsciously he feels anxious, lonely, and confused, because he has lost the sense of the meaning of life and the conviction of who he is and what he lives for.[195]

It is the common task of structural and humanistic Marxism to preserve this 'neglected aspect' of mode III -- the focus upon understanding of the human condition and the roles of man in expanding the scope of human potential and achievement.

Footnotes - Chapter VI

[1] Karl Marx, The Class Struggles in France 1848 to 1850 (Moscow: Progress Publishers, 1972).

[2] Frederick Engels, "Introduction" (dated March 6, 1895) in Marx, Class Struggles, pp. 5-6.

[3] Ibid., p. 7. The two 'tests' were: (i) When Marx had more leisure to review the economic course of events of the decade prior to the 1848 revolution, he became convinced that "what he had hitherto deduced, half a priori, from gappy material, became absolutely clear to him from the facts themselves, namely, that the world trade crises of 1847 had been the true mother of the February and March revolutions, . . ." (p. 7.) (ii) With the hindsight of a year, Marx "had very little to change" in his account as found in Class Struggles in his publication of The Eighteenth Brumaire of Louis Bonaparte. (p. 8.) That is, the same forces were at work in the time of Louis Bonaparte as Marx had earlier identified.

[4] Engels, "Introduction" in Marx, Class Struggles, pp. 7-8.

[5] Gordon Wright, France in Modern Times: 1760 to the Present (Chicago: Rand McNally & Company, 1960), p. 162.

[6] Marx, Class Struggles, p. 39. Italics in original.

[7] Ibid., p. 48. Italics in original.

[8] Ibid., p. 70. Italics in original.

[9] Wright, France in Modern Times, p. 161.

[10] Marx, Class Struggles, pp. 32-33. Our emphases, except for terms in French, which are italicized in the original.

[11] Priscilla Robertson, Revolutions of 1848: A Social History (Princeton, N.J.: Princeton University Press, 1952), pp. 13-15.

[12] Ibid., p. 29.

[13] Frederick de Luna, The French Republic Under Cavaignac: 1848 (Princeton, N.J.: Princeton University Press, 1969), pp. 78-79. Our emphasis.

[14] Marx, Class Struggles, pp. 40-44.

[15] Ibid., p. 112.

[16] Ibid., p. 124.

[17] Ibid., p. 136.

[18] Ibid., pp. 27-32.

[19] Ibid., pp. 111-113.

[20] Ibid., pp. 37-38. Italics in original.

[21] Engels, "Introduction" in Marx, Class Struggles, pp. 10-12, passim.

[22] V.I. Lenin, Imperialism: The Highest Stage of Capitalism (N.Y.: International Publishers, 1939).

[23] Marx, Class Struggles, p. 93. Italics in original.

[24] Ibid., pp. 40-41. Italics in original.

[25] Ibid., pp. 93-94.

[26] Ibid., p. 40. Italics in original.

[27] Ibid., p. 41. Italics in original.

[28] Ibid., p. 42. Italics in original.

[29] Ibid., p. 27. Italics in original.

[30] Engels, "Introduction" in Marx, Class Struggles, p. 10.

[31] Marx, Class Struggles, p. 28. Italics in original.

[32] Ibid., pp. 31-32. Italics in original.

[33] Ibid., p. 32. Italics in original.

[34] Wright, France in Modern Times, p. 161.

[35] Frederick Engels, "Preface to the Third German Edition" of Karl Marx, Eighteenth Brumaire of Louis Bonaparte (3rd. ed.; Moscow: Progress Publishers, 1954), p. 9.

[36] Robertson, Revolutions, p. 13.

[37] Marx, Class Struggles, pp. 28-31.

[38] Ibid., pp. 30-31.

[39] Ibid., p. 28. Italics in original.

[40] de Luna, Cavaignac, p. 86.

[41] Ibid., pp. 32-35.

[42] Marx, Class Struggles, p. 38.

[43] Ibid., pp. 33-34. Italics in original.

[44] de Luna, Cavaignac, p. 88.

[45] Ibid., p. 85.

[46] See de Luna, Cavaignac, p. 93, and Robertson, Revolutions, p. 45, for brief statements on how the demand for a republic came from the working classes.

[47] de Luna, Cavaignac, p. 95.

[48] Robertson, Revolutions, pp. 43-44.

[49] de Luna, Cavaignac, p. 90.

[50] See Ibid., p. 92, for a brief overview of the extent of political 'radicalism' in the Provisional Government.

[51] Ibid., pp. 97-98.

[52] Ibid., pp. 115-116.

[53] Ibid., p. 108. Italics in original.

[54] Marx, Class Struggles, p. 35. Italics in original.

[55] de Luna, Cavaignac, p. 94.

[56] Robertson, Revolutions, p. 85.

[57] Marx, Class Struggles, p. 46.

[58] Marx, Eighteenth Brumaire, p. 90. Italics in original.

[59] Marx, Class Struggles, p. 37.

[60] Ibid., p. 35. Italics in original.

[61] Ibid., p. 27.

[62] Karl Marx, Capital: A Critical Analysis of Capitalist Production, Vol. I, trans. from the German edition by Samuel Moore and Edward Aveling and edited by Frederick Engels (Moscow: Progress Publishers), p. 576.

[63] Ibid., p. 584.

[64] Karl Marx and Frederick Engels, Manifesto of the Communist Party, in Karl Marx and Frederick Engels, Collected Works, Vol. VI (London: Lawrence & Wishart, 1976), p. 491.

[65] Marx, Capital, Vol. I, pp. 584-589.

[66] Marx, Manifesto, p. 492.

[67] Ibid., p. 485.

[68] de Luna, Cavaignac, pp. 74-75.

[69] Ibid., pp. 129-130.

[70] Marx and Engels, Manifesto, p. 492.

[71] We must note, however, that France did have a severe so-called 'poor problem' and was in fact becoming slowly dominated by industrialism and a poverty-stricken working class was emerging. (See Robertson, Revolutions, pp. 17-18.) However, we are posing a question of degree.

[72] Robertson, Revolutions, p. 18.

[73] See Marx, Capital, Vol. I, pp. 474-475.

[74] See Ibid., p. 602.

[75] See Ibid., pp. 406-407.

[76] See de Luna, Cavaignac, p. 100.

[77] See Ibid., pp. 271-285, and pp. 289-318 for an overview of the socio-economic reforms instituted by the government under Cavaignac.

[78] Marx and Engels, Manifesto.

[79] Marx, Class Struggles, p. 49. Italics in original.

[80] Ibid., pp. 52-53. Italics in original.

[81] de Luna, Cavaignac, p. 135.

[82] Marx, Class Struggles, pp. 35-37.

[83] Marx and Engels, Manifesto, p. 487.

[84] Marx, Class Struggles, p. 50. Italics in original.

[85] Robertson, Revolutions, pp. 69-71.

[86] de Luna, Cavaignac, p. 98.

[87] Ibid., p. 160.

[88] Karl Popper, "What is Dialectic?," Mind, Vol. 49, N.S. (1940), p. 424.

[89] Karl Marx and Frederick Engels, The German Ideology (Part One, with Selections from Parts Two and Three, together with Marx's "Introduction to a Critique of Political Economy"), ed. with an Introduction by C.J. Arthur (N.Y.: International Publishers, 1970), pp. 46-47.

[90] Karl Marx, Grundrisse: Foundations of the Critique of Political Economy (Rough draft), translated, with a Foreword, by Martin Nicolaus, a vol. in The Pelican Marx Library, general ed. Quintin Hoare (London: Allen Lane, a division of Penguin Books Ltd., 1973), p. 85. Italics in original.

[91] See George Novack, An Introduction to the Logic of Marxism (5th ed.; N.Y.: Merit Publishers, 1969), pp. 69-96, for an overview of the dialectical method.

[92] Karl Popper, The Poverty of Historicism, (3rd. ed.; London: Routledge & Kegan Paul Ltd., 1961), p. 76.

[93] Ibid., pp. 82-83. Italics in original.

[94] Engels, "Introduction" in Marx, Class Struggles, pp. 5-6.

[95] Cited in Richard Mattessich, Instrumental Reasoning and Systems Methodology: An Epistemology of the Applied and Social Sciences, Vol. 15 of Theory and Decision Library, ed. by Gerald Eberlein and Werner Leinfellner (Holland: D. Reidel Publishing Company, 1978), p. 277. The citation is acknowledged to be from W.R. Ashby, "General Systems Theory as a New Discipline," General Systems, 3, 1958, p. 2.

[96] Mattessich, Instrumental Reasoning, p. 277.

[97] T. Downing Bowler, "General Systems Theory as Philosophy" in Society for General Systems Research [SFGSR], Improving the Human Condition: Quality and Stability in Social Systems; Proceedings of the Silver Anniversary International Meeting, London, England, August 20-24, 1979, ed. by Richard F. Ericson (Louisville, Kentucky: Society for Systems Research, Systems Science Institute, University of Louisville, 1979), p. 20.

[98] Erwin Laszlo, Introduction to Systems Philosophy: Toward a New Paradigm of Contemporary Thought, with a Foreword by Ludwig von Bertalanffy (N.Y.: Gordon and Breach, Science Publishers, Inc., 1972), p. ix. Italics in original.

[99] Mattessich, Instrumental Reasoning, p. 299. Italics in original.

[100] Alan R. Thomas and Martin Lockett, "Marxism and Systems Research: Values in Practical Action" in SFGSR, Proceedings, pp. 284-293.

[101] Ibid., p. 285. The reference is to P. Quist, "The Epistemology of Action Research," Acta Sociologica, 21 (1978).

[102] Mattessich, Instrumental Reasoning, p. 306. Italics in original.

[103] Ibid., p. 307. Italics in original.

[104] Ibid., p. 307.

[105] Ibid., p. 307.

[106] Ibid., p. 308. Italics in original.

[107] Ibid., p. 307. Italics in original.

[108] Ibid., p. 307. Italics in original.

[109] Ibid., p. 309.

[110] Ibid., p. 309.

[111] Ibid., p. 309.

[112] Ibid., p. 311.

[113] Ibid., p. 311. Italics in original.

[114] Ibid., p. 311. Italics in original.

[115] Ibid., pp. 314-315. Italics in original.

[116] Ibid., pp. 314-315. Italics in original.

[117] Thomas and Lockett, "Marxism and Systems Research," p. 285.

[118] Ibid., pp. 285-286. The citations referred to are acknowledged to be, in order: F. Engels, Anti-Duhring (London:

Lawrence & Wishart, 1975); T.B. Bottomore and M. Rubel (eds.), Karl Marx: Selected Writings in Sociology and Social Philosophy (Harmondsworth: Penguin, 1963); L.S. Feuer (ed.), Marx and Engels: Basic Writings on Politics and Philosophy, 1969); P.B. Checkland, "The Shape of the Systems Movement," Journal of Applied Systems Analysis, 6:129-135; L. Lafreniere et al., "An Account of the International Conference on Applied General Systems Research: Recent Developments and Trends, Binghampton, N.Y.," Journal of Applied Systems Analysis, 6:107-112.

[119] Thomas and Lockett, "Marxism and Systems Research," p. 285. The citation is from R.N. Rapport, "Three Dilemmas of Action-Research," Human Relations, 23(6):499-513.

[120] Thomas and Lockett, "Marxism and Systems Research," p. 286.

[121] For another, more detailed, overview of the conceptual framework of systems theory we recommend the very lucid account of T. Downing Bowler, "General Systems Theory as Philosophy" in SFGSR, Proceedings, pp. 20-29. Bowler undertakes to present General Systems Theory "as a series of universal generalizations" (p. 20) and succeeds in outlining a very succinct and heuristically useful schema of system theory's "inferences" and principles (pp. 25-27).

[122] Gerald M. Weinberg, An Introduction to Systems Thinking (N.Y.: John Wiley & Sons, 1975), p. 39.

[123] Arthur Brittan, "Systems, Structures, and Consciousness: the Social Psychology of Meaning" in The Rules of the Game: Cross-disciplinary Essays on Models in Scholarly Thought, edited by Theodor Shanin (London: Tavistock Publications Limited, 1972), p. 337.

[124] Ibid., p. 338.

[125] The above definitions, as well as the realization of the utility of a definitional approach in discussing the systems perspective, evolved out of a graduate seminar the author participated in at the University of Alberta, Edmonton, Canada, during the months September to December, 1976, under the tutelage of Dr. Richard Jung.

We have discussed the method and the significance of the systems approach for historical inquiry -- again relying heavily upon Dr. Jung's seminar -- elsewhere. See Kas Mazurek, "The Concept of 'Change' in History and in the Physical Sciences: A Comparison Based on Systems Theory," in print, Review Journal of Philosophy and Social Science, to be released approximately spring, 1981.

[126] Thomas and Lockett, "Marxism and Systems Research," p. 284.

[127] Michael Barratt Brown, "Marx's Economics as a Newtonian Model" in Rules of the Game, ed. by T. Shanin, pp. 122-144.

[128] Ibid., p. 125.

[129] Ibid., p. 126. Brown cites from Marx's "Preface" to A Contribution to the Critique of Political Economy. Phrase in brackets is Brown's wording. Underlined terms are our emphases.

[130] Brown, "Marx's Economics," p. 126.

[131] Ibid., pp. 126-127. Brown refers to the "Preface" to the first edition of Capital in both of his citations.

[132] Brown, "Marx's Economics," p. 127. Brown is citing, respectively, from Engels, Anti-Duhring, and Marx, "Preface" to the first edition of Capital.

[133] Brown, "Marx's Economics," p. 131.

[134] Karl Marx, Grundrisse: Foundations of the Critique of Political Economy (rough draft), translated, with a Foreword, by Martin Nicolaus, a vol. in The Pelican Marx Library, general ed. Quintin Hoare (London: Allen Lane, a Division of Penguin Books Ltd., 1973), p. 33.

[135] Karl Marx, Capital: A Critical Analysis of Capitalist Production, Vol. I, trans. from the German edition by Samuel Moore and Edward Aveling and edited by Frederick Engels (Moscow: Progress Publishers), p. 386. See also Marx, Grundrisse, p. 161.

[136] Marx, Grundrisse, p. 160.

[137] Bowler, "General Systems Theory as Philosophy," p. 23.

[138] Brittan, "Systems, Structures, and Consciousness," p. 340. Our emphases.

[139] Frederick Engels, Dialectics of Nature, trans. and ed. by Clemens Dutt with a Preface by J.B.S. Haldane (N.Y.: International Publishers, 1940).

[140] Karl Marx and Frederick Engels, The German Ideology (Part One, with selections from Parts Two and Three, together with Marx's "Introduction to a Critique of Political Economy"), ed. and with an Introduction by C.J. Arthur (N.Y.: International Publishers, 1970), p. 53.

[141] B.F. Skinner, Walden Two (2nd. ed.; N.Y.: Macmillan Publishing Co., Inc., 1976). Our emphases.

[142] George Novack, An Introduction to The Logic of Marxism (5th. ed.; N.Y.: Pathfinder Press, 1969), p. 103.

[143] Sidney Hook, "The Hero in History" in Ronald Nash, ed., Ideas of History, Vol. 2 (N.Y.: E.P. Dutton, 1969), p. 307. Here, Hook is referring to Marxism's critique of Hegel and the post-Hegelians.

[144] Here, we note Engels is much more of an 'economic determinist' than Marx often appears to be. We note a representative assertion in a Sept. 20, 1884, letter to Kautsky:

> As soon as you speak of means of production you speak of society, specifically the society determined by these means of production. Means of production-*in*-*themselves*, outside society, without influence upon it, are just as non-existent as is capital-*in*-*itself*.

Karl Marx and Frederick Engels, Selected Correspondence (Moscow: Foreign Languages Publishing House: Published in Great Britain by Lawrence Wishart Ltd., London, 1956), p. 452. Italics in original.

Marx often appears to be less rigid in his causal notions -- at the consequence of being more ambiguous. See, for example, the introductory pages of Karl Marx, A Contribution to the Critique of Political Economy, Introduction by Maurice Dobb (N.Y.: International Publishers, 1970).

[145] Marx and Engels, The German Ideology, p. 65.

[146] Ibid., pp. 57-60.

[147] John Jagodzinski, Aesthetic Consciousness and Historical Criticism, unpublished Ph.D. dissertation (Edmonton, Canada: University of Alberta, 1980), pp. 22-24. Italics in original. Jagodzinski makes reference to L. Althusser, For Marx (London: New Left Books, 1971).

[148] Jagodzinski, Aesthetic Consciousness, pp. 29-30. The reference to "the distinction between 'economic factors' and economic structure" is acknowledged to be from K. Kosik, Dialectics of the Concrete (Boston: D. Reidel Pub. Co., 1976, Boston Studies in the Philosophy of Science, 52).

[149] B.F. Skinner, Walden Two. See footnote no. 141 above.

[150] Our thanks to Mr. Juan Espinaco for stimulating informal discussions articulating the concept of '*Angst*.'

[151] Marx, "Preface" to A Contribution to the Critique of Political Economy, as cited in Brown, "Marx's Economics as a Newtonian Model," p. 126.

[152] Albert Einstein, "The Fundamentals of Theoretical Physics" in *Ideas and Opinions*, by Albert Einstein, ed. by Carl Seeling, and other sources, new trans. and revisions by Sonja Bargmann (Laurel ed.; N.Y.: Dell Publishing Co., Inc., 1954), p. 325.

[153] Bernard d'Espagnat, "The Quantum Theory and Reality," *Scientific American*, Vol. 241, No. 5, Nov. 1979, p. 165.

[154] Einstein, "Fundamentals of Theoretical Physics," p. 326.

[155] Ibid., p. 326.

[156] Corenlius Lanczos, *Albert Einstein and the Cosmic World Order* (N.Y.: Interscience Publishers, a division of John Wiley & Sons, Inc., 1965), p. 116.

[157] d'Espagnat, "The Quantum Theory," p. 160.

[158] Werner Heisenberg, *Physics and Philosophy: The Revolution in Modern Science*, a vol. in *World Perspectives*, planned and edited by Ruth Nanda Anshen (London: George Allen & Unwin Ltd., 1959). See chapter 11, "The Role of Modern Physics in the Present Development of Human Thinking," pp. 161-176.

[159] See Heisenberg, *Physics and Philosophy*, chapter 3 (pp. 46-57) for Heisenberg's own account of the so-called 'Copenhagen interpretation.'

[160] Patrick A. Heelan, *Quantum Mechanics and Objectivity: A Study of the Physical Philosophy of Werner Heisenberg* (The Hague: Martinus Nijhoff, 1965), p. 10. Heelan cites from Niels Bohr, *Atomic Physics and the Description of Nature* (Cambridge: 1961).

[161] Heelan, *Quantum Mechanics*, p. 42. Emphases in citation of Heisenberg are Heelan's. The citation is from W. Heisenberg, *The Physicist's Conception of Nature* (London: Hutchinson, 1958).

[162] Harold J. Morowitz, "Rediscovering the Mind," *Psychology Today*, August, 1980, p. 15. Italics in original.

[163] Mattessich, *Instrumental Reasoning*, p. 274. Italics in original.

[164] Bowler, "General Systems Theory as Philosophy," p. 28.

[165] Werner Heisenberg, *Philosophical Problems of Nuclear Science*, trans. by F.C. Hayes (N.Y.: Pantheon Books Inc., 1952), p. 22.

[166] Motoo Kimura, "The Neutral Theory of Molecular Evolution," Scientific American, Vol. 241, No. 5, November 1979, p. 98.

[167] Ibid., p. 98.

[168] Stanley N. Cohen and James A. Shapiro, "Transposable Genetic Elements," Scientific American, Vol. 242, No. 2, February, 1980, pp. 40-41.

[169] Kimura, "The Neutral Theory," p. 126.

[170] Cohen and Shapiro, "Transposable Genetic Elements," pp. 47-48.

[171] Morowitz, "Rediscovering the Mind," p. 16.

[172] Weinberg, An Introduction to Systems Thinking, p. 209. Our emphases.

[173] D. Bohm, "Indication of a New Order in Physics" in Shanin, Rules of the Game, p. 256. Italics in original.

[174] Weinberg, An Introduction to Systems Thinking, pp. 231-232. Italics in original.

[175] Brown, "Marx's Economics as a Newtonian Model," p. 142.

[176] As cited in Brown, "Marx's Economics as a Newtonian Model," p. 135. The citation is from V. Kiernan, "Notes on Marxism in 1968," Socialist Register, London, Merlin, 1968, p. 104, as noted by Brown.

[177] See, for example, Aron Katsenelinboigen, "Creation as a General Systems Phenomenon" in SFGSR, Proceedings, pp. 76-80.

[178] Bowler, "General Systems Theory as Philosophy," pp. 28-29.

[179] Katsenelinboigen, "Creation as a General Systems Phenomenon," p. 76.

[180] Gerard Radnitzky, Contemporary Schools of Metascience (3rd, enlarged, ed., three volumes in one; Chicago: Henry Regnery Company, 1973), p. 195. Italics in original.

[181] S. Bowles and H. Gintis, Schooling in Capitalist America: Educational Reform and the Contradictions of Economic Life (London: Routledge & Kegan Paul, 1976), p. 148.

[182] Morowitz, "Rediscovering the Mind," p. 16. Our assertion is merely inspired by Morowitz; he uses "observer's ignorance" in a different context.

[183] Adam Schaff, Marxism and the Human Individual, ed. by Robert S. Cohen, Introduction by Erich Fromm, Based on a translation by OlgierdWojtasiewicz (N.Y.: McGraw-Hill Book Company, 1970), p. 139.

[184] Ibid., pp. 139-140.

[185] Paul Piccone, "Dialectical Logic Today," Telos, Vol. 1, No. 2 (Fall, 1968), p. 74.

[186] Ibid., pp. 80-81.

[187] My thanks to Dr. Harry Garfinkle for assistance in articulating these concepts.

[188] Piccone, "Dialectical Logic," p. 75.

[189] Karl Marx and Frederick Engels, "Moralizing Critique and Criticizing Morality," cited in V. Afanasyev, Marxist Philosophy: A Popular Outline (Moscow: Foreign Languages Publishing House), p. 124.

[190] My thanks to Dr. Harry Garfinkle for stressing these qualifications in conversation.

[191] Ibid.

[192] Jurgen Habermas, Legitimation Crisis, translated by Thomas McCarthy (London: Heinemann Educational Books Ltd., 1976).

[193] George Gurvitch, Dialektik und Soziologie (Berlin, 1965) as cited in Piccone, "Dialectical Logic," p. 65.

[194] Piccone, "Dialectical Logic," p. 65.

[195] Erich Fromm, "Introduction" to Schaff, Marxism and the Human Individual, p. x. Italics in original.

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